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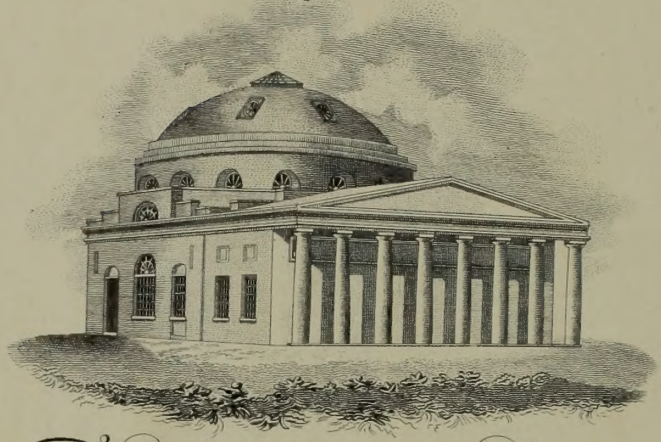

University of Maryland

University of Maryland Theses

Early Doctor of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1813-1887. The individual dissertations were bound together during the 1940's. The original tables of contents for the bound volumes contained multiple errors in authors' names, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

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UNIVERSITY OF MARYLAND

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[1] Stained. Portions illegible.

HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1821-1851; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

Author	Title	Notes
Parvis, John H.	Hysteria	
Symington, John	Hernia	
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UNIVERSITY OF MARYLAND

THESES

1867

Price, A. B.	Small Pox	21p.
Campbell, L. F.	Pneumonia	22p.
Rennolds, ~~H.~~ Henry T.	Typhoid Fever	21p.
Pinckard, F. Asbury	Malaria	36p.
Russell, Charles, F.	Hernia	28p.
~~Davidlow~~ Davidson, B. R.	Formation of Medical Character	20p.
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Symington, John	Hernia	18p.
Browne, B. ~~B.~~ Bernard	Surgery	20p.

AN

Inaugural Dissertation

ON

Small Pox.

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

A. S. Price

Of

Charles County, Md.

Session of 1867.

10

WMb
1894B

Variola:

Small Pox is probably more contagious than any other disease, which the Physician has to treat. It commences in much the same manner as various other exanthematous diseases. First there is a chill or rigor followed by fever of greater or less severity. There is heat, dry skin, and a hard frequent pulse. This initial fever lasts three or four days and is followed by an eruption which passes through various stages, viz. papular, vesicular, and pustular.

The ancients have left us no account of having been scourged with this contagious disease, and we do not know that it prevailed in Europe at all until some centuries after the Birth of Christ.

Indeed there is no notice that this great destroyer of human life, and spoiler of beauty, appeared in Europe until the Hosts of Mahomet, with their blood stained Crescent, began to devastate the fair valleys, and vine clad hills, of Southern Europe.

These fierce Arabs; not only conquered the fairest portions of Christendom: where they threw down the Cross to raise in its stead, the bloody crescent; not only converted the temples of Christianity into Moorish Mosques; But poured into Europe the foulest and most fearful disease that was ever known to Suffering humanity.

Small Pox has long been known in India and China, whence it spread over Arabia, and was carried by the Saracens and Moors into Egypt, Syria, and Inter Africa.

into Spain, and thence throughout the world.

At one time it was estimated that two fifths of the human race lost their lives by this loathsome disease, and it was rare to see a man forty years old who was not pocked.

Most writers have divided Small-Pox into two prominent varieties, called from their appearance, distinct and confluent. In the first the pustules are distinct or isolated in the latter they run into each other, and sometimes the patient's body has the appearance of one vast scab.

The first stage is so much like the first stage of some other diseases and especially of continued fever that it is difficult to make a diagnosis during the first two or three days. But if Variola is prevailing in a community, and if the patient has been exposed to its contagion and

especially if it has not been protected by vaccination or inoculation, you may suspect the disease will turn out to be Small Pox.

When fully formed you cannot mistake it for any other disease, if you have ever seen a case before the odor, a peculiar greasy smell, is unmistakable, the period of incubation is usually from ten days to two weeks, but it varies,

First there is a feeling of general malaise, then comes the rigor of longer or shorter duration, followed by hot skin, frequent pulse, loss of appetite and furred tongue, intolerable thirst, - sick stomach often vomiting, headache very severe, great pain in the back; if the disease is going to be very severe the pain is mostly in the lumbar region there is also pain in the limbs & great muscular weakness. There is sore throat, sneezing

and often the eyes are bright. In children the disease is often ushered in by convulsions. which do not always indicate a bad case.

As a general rule where the first symptoms are violent you may expect a severe attack. But where there are mild symptoms and no pain in the back, the disease will run a mild course.

The eruption begins to come out on the third day; it appears first on the face then on the body upper extremities and lastly on the lower extremities. It does not always appear thus; sometimes it comes out on the extremities first. The eruption may not appear until the 4th or 5th day.

When it comes out early it is a sign that the poison is very active and you must watch your patient carefully. the powers of life begin to flag you must sustain them.

When the eruption is fully out-

the fever generally abates, the stom-
ach becomes quiet, the head ache imin-
ishes, and the patient is relieved for a
time. This calm however must not
deceive the practitioner,
At this time when the eruption is
fairly out the second stage is said to com-
mence, This eruption which is at first
not much raised becomes papular and
on the second or third day it becomes
vesicular, The vesicles then become grad-
ually rounded and flattened at the
top and the centre appears umbilicated.
The skin around them becomes hard.
They continue to increase in size
until the eighth or ninth day of
the eruption, when they become
pustular. The liquid in these pus-
tules assumes the character of pus and
the pustules instead of being um-
bilicated become convex. About this
time arises the secondary fever
called the fever of maturation

This, the ninth day, is considered the most fatal day, and the second week is the most fatal week.

This fever is mostly typhoidic and often assumes a low form. If the quantity of pus formed is large and the case has been a severe one, the patient will require at this time sustaining treatment and care should be taken to keep up the vital force.

Variola is very often accompanied by sore throat. The fauces and tonsils are likely to swell and more or less salivation occurs. The saliva is at first thin and afterwards becomes viscid and ropy. The pustules only attack the skin and parts of the mucous membranes which are exposed to the air. They sometimes attack the foetus in utero the poison being conveyed to it by the poisoned blood of the mother. Though

She may be protected from its influence herself. It often causes the death of the foetus and consequently abortion. The pustules rarely attack the inner surface of the eyelids and it seems doubtful whether they ever attack the conjunctival membrane. Erysipelatous inflammations sometimes arise, and abscesses form in various parts of the body. The fever becomes hectic, or typhoid, low muttering delirium supervenes and many symptoms go to show that the River of life is tainted. Unless the Patient is supported, the drain on the system from pustulation causes the expenditure of nutrition to be greater than the income. The system becomes a Spendthrift: and Nature being unable to supply the demands, the patient sinks.

These cases require good food, wine Iron, Quinine, &c,

The face in this disease becomes much swollen, the eyes closed, and such is the deformity that it is, at times, impossible to recognize the most intimate acquaintance.

Small Pox has its periods of activity and dormancy. It may be dormant for a time then without any appreciable cause it breaks out afresh, and spreads over a whole county. During the winter & Spring of Sixty Six it spread with considerable virulence over a portion of Southern Maryland. And during its continuance many persons who had been vaccinated repeatedly, and on whom the disease had never taken hold more than once, on being vaccinated again, had a distinct variola and very appearance of true variola disease.

These persons would have contracted variola if they had been exposed to the contagion of small pox.

Variola most generally breaks out

during the winter when the destitute are crowded into small ill ventilated apartments. It sometimes breaks out during the Spring, and it is said that the Small Pox which appears in the winter is much worse than that which appears during the Spring.

Whether it ever arises de novo simply as an epidemic or not is not positively known, but it unquestionably occurs in a large majority of cases after exposure to the poison. The character of the case communicating the disease seems to have no influence over the severity of the one which may arise from it. A severe confluent form may give rise to a distinct form, & vice versa. The third stage is often little more than a period of convalescence. The pustules become dry and brown and begin to drop off soon after the twelfth day, and the swelling of the face subsides. This drying

and droping off generally commences on the same part of the body on which the Eruption first appears. Many of the pustules first shrink instead of bursting, and then drop off, leaving the skin beneath red and where the pustules have broken we will find a pit or pock mark. There have been two methods discovered of preventing the ravages of this fearful disease, One to communicate it in a mild form to a patient whose System had been prepared for it: and where the progress of the case may be kept under the control of the physician.

The other to prevent the patient from taking Variola by engrafting on him another disease. The first is called Inoculation; the last Vaccine.

By inserting a small quantity of virus under the Skin, you may produce a modified, or milder form of Small Pox than when it is propa

galed in the usual way, viz: by the lungs. This process is called inoculation.

The Chinese [illegible] in the habit of inoculating many centuries ago. by inserting a piece of pustule up the nostril, This was different from the present System as the patient took the disease through a mucus membrane. It was practiced in Turkey during the seventeenth century. But was not introduced into Europe until 1718 or 20. When Lady Mary Wortley Montague the wife of the English ambassador at Constantinople had her daughter inoculated" afterwards a Dr Keith who attended Miss Montague underwent the same operation.

The period of incubation is comparatively short and the disease much milder than when the poison is taken in by the lungs.

But it is doubtful whether inoculation was beneficial to humanity taking mankind as a mass; for every case inoculated became a point from which the poison was radiated, and spreading thus over a community, it caused certainly more cases & probably more deaths than would have occurred without it. Inoculation was therefore abandoned as soon as a safer mode of avoiding the terrors of genuine variola was discovered.

One of the most useful discoveries ever made in medicine was made known to the Profession by Edward Jenner. He deserves the thanks of every human being. His discovery has done more to lessen suffering and to relieve persons from a sickening fear of a most loathsome disease than

any other of modern times. The only parallel was the discovery of the antiperiadic powers of Jesuits bark.

Dr. J. ner found a prevailing belief among the peasants on certain dairy farms in Gloucestershire England that persons who were fortunate enough to contract Cow Pox, which is a vesicular disease, were protected from the contagion of variola. And finding this not an unfounded belief hit upon the happy idea, that the disease might be conveyed from one individual to another, and that the protecting influence might be so conducted also. And thus by protecting every one this scourge of nations might be driven from the Earth.

Dr. Jenner found that in those dairies where this disease existed that men were the milkers; and enquiring further found that the same men had charge of the horses, and that these horses suffered with grease or some kindred disease. This disease was transmited from the horses to the cows through the hands of the men. And when taken from the cow by the milker he was protected ever after from Small Pox. The next step was to discover whether this Eruption could be engrafted from one person to another and whether when so engrafted it would prove a protection.

"The 14th of May 1796 was the birth day of Vaccination matter was taken from the hands of Sarah Nelmes who had caught

"The disease from a cow and
Sested into the hand of James Phipps
a healthy boy of about 8 years of age
he went through the disease in a
regular manner, he was afterwards
inoculated and did not take
Variola." Other experiments were
made and it was soon found that
the Vaccine disease would pro-
tect the system from variola.

It does not always protect from
varioloid unless the Subject be
revaccinated from time to time.
The virus may fail to take effect.
A number of trials may be made
in vain, until Small Pox breaks
out as an epidemic. Then it will
readily affect the system.

There were of course many objec-
tions to Vaccination at first as
there always are to new discoveries
Most of these were very absurd
such as the superstitious and

uneducated are apt to bring forwards as for example, That it was impious to engraft a disease from a brute to human being.

On the third day after the inoculation of the matter the scar becomes red and shows signs of inflammation. about the fifth day the vesicle becomes umbilicated at the top, and grows gradually larger until it becomes well formed, round, and oval, and of shining appearance, it thus increases until the 11th day when it becomes full & turgid, Then the disease is at its height.

It then begins to decline a scab forms over the vesicle and the matter becomes thick like pus, and is contained in a single cavity. Instead of several distinct ones. This scab gradually hardens and becomes dark brown in hue.

In about four weeks it Seperates from the Skin leaving a white depressed Scar. on the face of this Scar are Several Slight pits or depressions. The System often Sympathizes with the progress of the disease. The arm often Swells as do the glands under the arm. These glands become at times very painful. There is very often fever and Sometimes a rigor but these Symtoms Soon pass off. It is Said that the nearer the cow the more Severe will be the Symptoms and it is a popular belief that it is more effectual. But Dr. Wood who ought to be good authority Says it is just as Effectual when many times removed. Be this as it may our astute Legislators have seen fit to impose a fine on any Physician who uses matter more than four degrees removed from the

cow. Law makers sometimes prove themselves to be great calves by the Statutes they enact. I do not mean to insinuate that our Sapient Senators have any relation to kine. But no one ever accused them of. vi. Solone,

The treatment of Small Pox is local and general. The General treatment is principally Hygienic. The patient should be kept in a cool well ventilated room. There is no need of Special treatment Symptoms may be treated as they arise. The disease can not be Cut Short and we should try to conduct our patient carefully through it. Mild purgation is sometimes necessary as Rochelle Salts. Sometimes an enema may do good. We may often give refrigerating drinks; as the Neutral mixture, or if the Stomach is

irritable the effervescing drinks etc.
Sarracenia Purpurea was at one time considered almost a Specific but is not so much thought of at present.

In the Sore throat attending upon Variola Alum and Cubebs may be used with advantage. Opium may be given to prevent irritative fever if there be no contra indication. Mineral acids may be used several times a day, Give some light but nutritious food, Wines, Wine, Whey, Brandies ect. When necessary. Lemonade and Carbonated waters often do good,

The treatment to prevent pitting is called Eclectic, Several means to this end have been used with more or less success, The application of Tincture of Iodine several times a day while the eruption is papular has been used with success. Puncturing the pustules

with a Surgeons needle dipped in a Strong Solution of nitrate of Silver, will often prevent the pocking. Mercurial ointment has often been used with great Satisfaction,

A Solution of Gutta Percha and Chloroform is Said to prevent the formation of the Scars. An ointment made of three parts Carbonate and one part of the Oxide of Zinc rubbed up to proper consistency with Olive oil, Is said to be as reliable an application to prevent pitting as any other. Evaporating lotions to lower the heat of the Surface, and the Chloride of lime as an antiseptic may be used, Soothing unguents and various powders are used, to mitigate the unbearable itching.

Very Respectfully

A. Baillie Price

Feb. 13th 1867

AN

Inaugural Dissertation

ON

Pneumonia.

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

D. F. Campbell.

of

Virginia.

Session of 18[illegible]

"Pneumonia."

Definition. Pneumonia may be defined as an inflammation of the substance of the lungs, or of its parenchymatous structure.

There are several kinds of pneumonia, for instance, it may be confined to a lobule, or occupy an entire lobe, constituting the so-called lobular, or lobar pneumonia. Inflammation may also steal upon the lung, without giving any notice of its presence, and injure the organ so much, that it is beyond our power to do any thing for it, in this case, or cases, it is said to be Latent Pneumonia.

Of pneumonia it is especially true, that we ascertain its situation, its extent, and every step of its progress by

means of the ear. All the symptoms that give us the most sure information respecting the nature of the disease, its increase on the one hand, or its abatement on the other, spring out of the actual changes wrought in the pulmonary substance itself, and all of these changes are disclosed to us by the method of auscultation.

There are three distinct stages of pneumonia. 1st. That of engorgement. The substance of the lung in this condition is gorged with blood or bloody serum. It is of a dark red color externally, and crepitates less under pressure than sound lung does; and if felt in this condition it will be found that there is more liquid than air in its cells. It is heavier also, than natural and inelastic, and holds in some degree the impression of the finger. When the engorged portion is cut it is found red, and a great

quantities of a reddish and frothy serum flows from it. 2nd. If the inflammation in the lung continues, it undergoes a further alteration, and presents the following characters. It is still red externally and within, but it crepitates no longer under pressure; and it sinks in water, it containing no air. Its cut surface presents sometimes, as is said, a uniform red color; sometimes a slightly mottled or variegated appearance, produced by an intermixture of specks of the black matter of the lung; while the spongy character of the organ is lost, and said to be solid; and the cut surface resembles very much the cut surface of the Liver, And hence Hepatization is applied to this condition of the lung by most writers. It is also said, that the texture of the organ in this condition is sometimes so rotten, that a slight pressure between the fingers is sufficient to reduce it to a state

or purp. 3rd. In a degree still further advanced, the pulmonary tissue, dense, solid, and impervious to air, as in the last stage, undergoes a alteration of color; it presents a yellow or brown, or dark color. If cracked between the thumb and fingers it is reduced to a yellowish grey pulp. This stage of the process of inflammation in the lung, is called by Laennec, grey hepatization, or purulent infiltration, by Andral grey softening. Gangrene sometimes occurs as a consequence of acute inflammation of the pulmonary substance.

There are two kinds, and inflammation may attack one or both, in the former case it is known as single, in the latter, as pneumonia. Again the inflammation may occupy a part of one lung, or the whole of it, but is said not to affect all parts alike. Also said to be partial to the right side of the body. Dr. Hutton gives an in-

-stance where there were one hundred and fifty one cases of pneumonia, ninety were of the right lung alone, thirty eight of the left alone, seventeen of both sides at once, and in six, the situation was uncertain. This certainly is very good proof that the right lung is the one most affected. Again, with respect to that part of the lung which is most liable to inflammation, there are remarkable differences. It is well know, and said to be, a very important fact in respect to diagnosis, in some cases, that the lower lobes are more liable to inflammation than the upper. I believe it is the general impression that the inflammation commences in the lower lobes, and spreads upwards frequently, to the superior lobes.

Inflammation of the Bronchi constantly accompanies inflammation of the parenchyma. The mucus membrane presents a red color, both in the large, and in the

small branches of the air passages; and when a single lobe is inflamed, it has been observed that the redness of the mucus membrane existed in those bronchial tubes alone, which were distributed to that lobe. Therefore a person may have bronchitis without pneumonia; but pneumonia with the same extent of bronchitis is never seen. There may be some pleurisy too, for the majority of cases of pneumonia are attended with a degree of inflammation of the investing membrane of the lungs; so often is this the case that some writers call the disease by the compound name of pleuro pneumonia. Now such being the changes which the lungs undergo when inflammation affects the pulmonary tissue, I will inquire what signs of its existence the inflammation holds out; and in so far as, not having the power of seeing what is going on within the thorax, may notwithstanding ascertain

the important changes which are now transacted.

Physical signs of the first stage, that of engorgement. Diminution of the sound is generally observed over the affected part on percussion; auscultation exhibits an equal dry crepitation, which is best heard at the close of a deep inspiration, and by coughing. The respiratory murmur is mingled with the crepitation or may be absent. In the neighborhood of the affected part it is natural or puerile. The voice and cough are rather more resonant than usual. If the ear be applied to the surface of the chest, with or without the intervention of the stethoscope, and the portion of lung lying to that surface happens to be in the first stage of inflammation, that of engorgement, a peculiar crackling sound is heard; the smallest kind of crepitation, which has been compared to the sound produced by rubbing between

the finger and thumb of one's own hair, close to the ear. Watson speaks of it as minute crepitation, or the crackling of pneumonia. If we listen to the breathing of a healthy person we shall hear as the breath goes in and out; but especially as it goes in, a smooth and gentle rustle which is known as the respiratory murmur, or the vesicular breathing. But when the inner surface of the bronchial tubes, and of their branches, is preternaturally dry, and humid, this sound is altered; a hissing or whistling sound is heard as the breath goes in and out, and this is called Sibilus; or a still deeper note, a snoring voice is heard as the patient inspires or expires, a sound like the cooing of a pigeon, and this is call'd Ronchus. These two sounds in their modifications, constitute the dry sounds of respiration. Ronchus belongs to the larger divisions of the bronchi exclusively, and Sibilus to the smaller

Sound which results from the passage of air through a liquid, by the formation and bursting in rapid succession of numerous little air bubbles and termed as crepitations. This process may take place in the large air tubes, when it is known as large crepitation, or in the smaller, when it is known as small crepitation. When the crackling sound of crepitation, the ear applied to the corresponding surface of the chest, feels it heave up in inspiration, but no sound is heard if any, it is a new sound, not the vesicular murmur, nor the minute crepitation; but a whistling sound is heard, little gusts of air puffed in and out, most distinct at the termination of a night or. This is the sound to which the term bronchial respiration has been given.

Physical signs of the 3rd stage. When hepatization has occurred, the motion of the affected side is impeded,

and immediately above the sternum, and in the corresponding triangular space on either side, there is often an evident depression. Percussion is dull over the affected part in every position of the patient. On auscultation the respiration is found to be replaced by bronchial respiration. The respiratory murmur is also louder in the other portions of the lung, and the voice and cough are more resonant. When suppuration supervenes, as in the 3rd stage, I think pretty much the same signs persist. When gangrenous or suppurative cavities are found they present like signs. I have given as far as I am able and that very imperfectly, some of the principal signs of pneumonia in its different stages. I will next mention some of the general signs and symptoms of the disease. In the majority of cases, it is said that the commencement of inflammation of the

lung is marked by shivering, followed by heat and increased frequency of the pulse, soon after a very severe pain of a lancinating character comes on, with cough and a sense of oppression in the breast. Therefore it might be said that the usual symptoms of pneumonia are, pain, more or less severe on one side of the chest; dyspnoea; cough; a peculiar expectoration; and fever. The pain in pneumonia is most commonly experienced on a level with, or a little below one or other breast; it may exist in almost any part of the thoracic parieties. It is agrivated by cough; and by a full inspiration, also by sudden changes of posture, and by percussion of the part. The dyspnoea that occurs in pneumonia varies greatly, both, in degree and kind in different cases; sometimes it is very slight, and again it is so severe, that the patient, very often, cannot lie down, and can scarcely speak. The breathing is said

to be more impeded when the patient lies on the sound, than when on the diseased side, but patients laboring under this disease, almost all, lie upon their backs. — Delerium is also a symptom which very often occurs in an attack of pneumonia, and is said, to be, a very dangerous one, it denotes that the due arterialization of the blood is interfered with by the pulmonary affection.

The cough in pneumonia is said, to have no peculiar character; and affords but little information. It is usually dry in the outset, but in a few hours it is accompanied by the expectoration of a peculiar sputa, which constitute one of the most certain indications of the presence of pneumonia. The expectoration of pneumonia when well marked, consists of transparent and tawny, or rust colored sputa, uniting in the vessel containing it, into one jelly like or trembling mass, and of such viscidity that the vessel, may be

turned upside down, and shaken, with-
out being detached from the bottom
or sides, when such expectoration is found,
there is almost certainly pneumonia.
At the commencement of the disease,
either nothing is expectorated, or simply some
bronchial mucus; but on the 2nd or 3rd
day generally, the matters expectorated
assume the characteristic appearance,
that is, they come to be composed of mu-
cus, combined with blood. The blood
and mucus are mixed together, and in
proportion to the quantity of blood,
the sputa become of a yellow color,
or of the color of rust, and at the
same time become glutinous and tena-
cious; they adhere together so as to form
one like mass. So long as this mass
flows readily along the sides of the
vessel, when it is tilted, so long is there
reason to hope, judging from this circum-
stance, that the inflammation does not
exist to first degree. But the sputa

often acquire an extraordinary degree of viscidity; so as no longer to separate themselves from the vessel when it is inverted, they cannot be shaken out, when this happens, we fear that the pneumonia reaches its second degree. In fact when the sputa become thus rusty and viscid, the chest, when struck, is said to return a very dull sound, and the vesicular breathing is abolished, and bronchial respiration takes its place. The pneumonia is then said to be at its acme, and the respiration remains for some time stationary. At length, if the inflammation recedes the sputa become again less tenacious, less red and yellow, and more like the expectoration of catarrh. But if the disease go on from bad to worse, the rusty colored sputa continue to the end; in a case like this it is said that there is no expectoration, or even none at all. Or that the mucus ceases to be secreted, or that its excretion is no longer

possible, or in the extreme debility, or on account of the patients debility. The sputa is accumulated in the bronchi, trachea and larynx, in succession, fills up the air passages, and suffocates the patient. In some instances the expectoration, in the advanced stages of the disease, consists of a fluid having the consistence of gum water, of a brownish red color, which is known as prune juice Expectoration. When this kind of expectoration presents itself, it announces the existence of the 3rd Stage of pneumonia. The color of the sputa peculiar to pneumonia depends upon union of blood with altered mucus. When the pneumonia passes into Gangrene, which is said to be of rare occurrence, the expectoration becomes of a greenish, reddish, or dish gray color.

As to the duration of Pneumonia, it is laid down upon an averaged

at ten days, or a fortnight by Dr Watson. The diseases which pneumonia is to most liable to be confounded are bronchitis, pulmonary oedema, pleurisy, and certain stages of Phthisis. It is in cases of bronchitis extending to the minute ramifications of the bronchial tubes that the greatest resemblance is presented to pneumonia. In bronchitis, the sensations are more those of soreness than actual pain, and are usually seated in the anterior and upper part of the chest, behind and in the vicinity of the sternum; the expectoration sometimes streaked with blood, never has the extremely viscid and rusty character of that of pneumonia, and when it once begins is much more copious; no true crepitant rale is heard, but instead of it the dry and mucous rales; there is no tubular respiration or resonance, and very seldom a permanent want of

respiratory murmur in any part of the chest, and finally there is no considerable dullness on percussion. But when the two diseases are combined, and when the pneumonoid is in the centre of the lung, or disseminated, it is sometimes difficult, if not impossible to distinguish between them. —

Prognosis. — In cases of primary pneumonoid of the common or lobar kind, occupying only a portion of a single lung, occurring in persons of a good constitution, and without complication of any kind, there is very good reason to hope for a favorable issue. With proper treatment cases of this kind can be successfully handled. The disease is said to be remarkably mild between the ages of six and twenty one.

In debilitated persons, and those of fifty years, the disease is much more fatal. In very old age it is still more

dangerous - The danger is far greater where both lungs are affected, or in double pneumonia. —

Causes. Vicissitudes of the weather are among the most frequent causes of pneumonia. Sudden exposure to cold, when the body is warm and perspiring is very apt to induce it. Direct violence, acrid or poisonous inhalations, violent exertion of any kind which accumulates the blood in the lungs, powerful emotions, excesses in drinking & the suppression of habitual discharges are ranked among the occasional causes. Of the predisposing causes, cold may be ranked among the most efficient. Hence the disease is said to prevail most in cold countries, and in the colder seasons. It is also the seasons of the year for its approach is towards the end of winter, and in Spring. — Age and sex do not appear to have any considerable influence over the frequency of its occurrence.

19th.

The disease is said to be more common in men, but this is accounted for, by the men being more exposed to the vicissitudes of the weather, and to other exciting causes.—

Treatment. It seems that most of the best authors on the treatment of this disease, when the patient has a vigorous constitution, rely on the lancet as the most efficient remedy, especially where the disease is well developed. By the evacuation of blood the inflammation is removed, at the same time deminishing the labour of the lung. In deciding on the amount of blood to be taken, this must depend upon the stage of the disease, the state of the pulse, and the constitution of the patient. If a vigorous, robust patient, in the earlier stage of the disease, that of engorgement, and a strong pulse, from sixteen to thirty ounces may be taken at the first

operation. It is said that the progress of the disease may be arrested by this mode of treatment. But in case the symptoms have in no degree abated, bleeding may again, and again be resorted to if the pulse is not reduced, and the inflammatory symptoms not checked. The occurrence of nausea, or faintness while the patient is bled in the sitting posture, should be a signal to stop the discharge. The Tinct. of Veratrum Viride is said to be very useful in this disease, where there is difficult deglutition, and when bleeding is contraindicated.

After the first bleeding the bowels should be thoroughly evacuated by an active cathartic, as Calomel and Jalap. It may be necessary to keep them open once or twice per day throughout the disease, which will be effected by small doses of castor oil or magnesia. After the bowels are evacuated, small doses of Tartar emetic, repeated at short

intervals, from the twelfth to the quarter of a grain every hour or two is recommended; and where the skin is hot and dry it may be combined with the neutral mixture or nitre, if borne well by the stomach. Under this treatment, it is said, that very frequently the symptoms of inflammation will gradually subside, and the patient recover without further remedies. But should the disease prove obstinate, and run into the 2nd stage that of Hepatization, it will then be proper to restort to the mercurial impression. As for the lung has become solid, the treatment must still be regulated rather by the state of the system at large, than by the actual condition of the lung. If the pulse continue firm, wait for the effect of the mercury. But when there is sunken features, a pallid face, coldness of the Extremities, delerium, a feeble or irregular

22nd "

pulse, proclaim that the vital powers are giving way, it will then be requisite, as in other cases where death is threatned by asthenia, to administer cordial and stimulating medicines, such as the Carbonate of Ammonia, wine, and feed the patient well on beef tea.

AN

Inaugural Dissertation

ON

Typhoid Fever

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Henry T. Reynolds.

Of

Baltimore, Md.

Session of 1861-2

Typhoid Fever.

The various names which have been proposed to designate this affection are each open to objection in consequence of their inadequacy to convey a just conception of its peculiarities. The name Typhoid will most probably be continued until further researches shall have clearly delineated its features, circumscribed its precise limits and ranked it among the exact diseases of our nosonomy.

Symptoms.— The premonitions are by no means positive as the causes which produce it may and often do produce affections entirely dissimilar in their nature and course.

Among the first evidences of the approaching attack may be mentioned general and decided lassitude,

disposition to mental or physical exertion, lack of interest in employment and indulgencies which at [illegible] times would enlist attention and excite pleasure.

More or less febrile excitement is always present varied not unfrequently with chilly shocks. Frontal headache generally accompanies this condition and mental irritability is manifested upon the most trivial occasions. Anorexia and vomiting frequently attend upon this stage and very generally there is epistaxis and diarrhea. Patients complain of pain in the iliac region and lower extremities. The face is flushed, the eyes are glassy and the eyelids dark and heavy, the pulse accelerated and the tongue gradually becomes coated with a whitish fur. This stage lasts from three to ten days the symptoms slowly becoming more decided until the patient is compel-

led [illegible] main in bed.

[illegible] now assumes a [illegible]; [illegible] becomes weaker and more fre- [illegible] generally exceeding ninety and not uncommonly reaching a hundred and fifteen or twenty; the skin is hot and dry and scattered papillae appear upon the abdomen and other parts of the body which are partially diagnostic though they are sometimes absent or so small that they escape detection. Patients are often relieved of the intensity of the fever by some degree of diaphoresis. The haggard, exhausted and wearied expression of countenance common to this stage is characteristic. The patient is listless and wears a stupid aspect. The skin is often dusky and shows signs of capillary congestion.

The headache which is often so marked is one of the chief sources of anxiety on the part of the patient, this

how [illegible] gradually abates during the second week and a marked [illegible] [illegible] generally accompanied with [illegible] and forgetfulness, the patient evincing desires rational or otherwise and in the next moment losing the remembrance of having made a request. The delerium in some instances is so great that patients lose all sence of their condition and surroundings, get out of bed if not prevented, talk incoherently and become angry when prohibited from doing as they please. This symptom is seldom so violent as to require active intervention, though when it is persistent and violent the patient should not be left alone as any imprudent exposure in this condition might prove irreparable by aggrevating the already serious situation.

The mental faculties throughout

[illegible] have little, [illegible] and cannot
muster scarcely the weakest effort.
The [illegible] nervous system is in a state of
[illegible] and but slightly impressible;
flies crawling over the face attract little
or no attention. The [illegible] of the system
are unappreciated, fluids taken into the
mouth are swallowed, or slobbered or may be said
to find their way into the stomach.
The urine and feces in severe cases are
passed in bed, patients not having sufficient energy to control the excretory
functions. Wakefulness is a
common symptom. They often seem to
sleep yet when awake do not appear
to have been refreshed.

All the senses are very much blunted
and continue so throughout the attack.
They catch at objects which their unbalanced fancy floats before them; pick their
coverings and distort everything they see.
The hearing is always impaired, yet seldom to such a degree that they cannot

[illegible] addressed in a loud tone.

[illegible] patients are little disposed to change [illegible] in bed the skin often [illegible] [illegible] of the body long subjected to pressure and as they are not aware of this liability they do nothing to avoid it. The cuticle of the lips, hands and feet is often observed to desquamate before or during convalescense.

The stomach is always impaired in its function; it cannot digest solid food easily nor does the patient have strength or energy sufficient to masticate such. The patients sensations or rather such as he manifests are not a criterion of what his system needs, hence the attendants should be cautioned not to let their friend starve because he dont ask for food and drink but to give him proper food in proper quantity according to his condition.

The tongue is nearly always coated with either a whitish, yellowish or brownish fur.

wh[illegible] generally exfoli[illegible]ed, in some cases [illegible] than once, leaving [illegible] superficial [illegible]eeply reddened and smooth [illegible]oming dry or moist, the latter being a favorable sign.

The teeth in most severe cases are coated with sordes about the sixth or eighth day. Vomiting rarely occurs except there be too much food taken into the stomach. In the majority of cases diarrhea is present and greatly strengthens the diagnosis. The evacuations are of an ochre yellow color and of an alkaline reaction. The dejections in some cases are natural throughout and in exceptional cases there is relief constipation. Hemorrhage from the bowels may occur, which though denoting gravity is not to be regarded as particularly unfavorable. The abdomen is almost always tender to the touch and tympanitic after the fifth day. The distention of the colon is usually in

pro[illegible] to the severity of the attack; sometimes it is so great as to interfere[illegible] respiration by pressing on the [illegible] on which occasions great distress. The rose-colored spots upon the abdomen disappear upon pressure returning when the finger is removed. Sudamina may be detected about the region of the clavicle or in the axilla in the latter period of the disease. Bronchitis in some degree is usually present and consequently more or less cough; auscultation reveals sonorous or sibilant rales. Pneumonitis often exists; in that event the respiration is more frequent with an occasional spasmodic inspiration. When this occurs in the absence of Pneumonitis the approach of coma may be anticipated. Epistaxis may occur at any period of the disease, but requires little if any attention unless it becomes copious.

T[illegible]lation is accelerated in almost all cases: in some the pulse is strong and [illegible] in others feeble. When in[illegible] as high as 120 the danger is considerable, below that it is proportionately less. In aggrevated cases the pulse may in the progress of the disease reach 160. In rare instances the pulse is less frequently than in health. Even after convalescense the pulse continues more rapid than normally.

The heat of the body is almost invariably increased, though there may be intervals when the temperature falls below 98°. When in the morning the temperature is less than during the night the indication is favorable. If it rises to 106° or 108° the prognosis is very unfavorable.

The bladder should be examined frequently as there is apt to be retention of urine; when found distended th[illegible]

can [illegible] should be employed. The proportion of urea and uric acid in the urine [illegible] ther with the urosacine is [illegible] increased and not unfrequently albumen is found, which indicates gravity of the disease. The kidneys are sometimes involved as renal casts are occasionally observed in the urine. When the urea is deficient uremic poisoning may be apprehended.

When convalescense is declared the practitioner should not be too free in pronouncing the patient out of danger as the ulcerated Peyer's glands are liable to perforate the intestines and cause peritonitis which may result fatally. Though an uncommon sequence it should not be disregarded.

Anatomical Characters. — The lesions distinctive of Typhoid Fever are those found in the Peyerian and solitary glands of the small intestines. The

are [illegible] enlarged and ulcerated and of a pink or purple hue. The portion of peritoneum corresponding to them is found injected. The morbid deposite takes place first in those glands nearest the caecum and those next above become enlarged in succession and ulcerate. The glands often slough leaving an ulcerated surface which terminates in a cicatrix the glands probably being never reproduced. When perforation takes place from distention or sloughing the peritoneum exhibits evidences of acute inflammation. The mucus lining of the ilium is usually found inflamed also.

The mesenteric glands also are found diseased, those more particularly, which are contiguous to the ulcerated Peyer's glands. At first they are much increased in size, but diminish gradually as the sloughing within the in-

[illegible] progresses, the deposite undergoing [illegible]ption. The spleen and other [illegible]inal viscera are often found [illegible]. Some degree of congestion is usually found in the brain, lungs and bronchial mucus membrane. The heart liver and other organs lose their firmness, the substance being found flaccid.

Causation.— Young persons appear to be more susceptible to the disease the liability diminishing after forty years of age. Sex appears to have no bearing upon it. It is commonly observed among those living in ill-ventilated apartments where many are crowded together; among neglected, poorly fed and injudicious persons. Localities where putrescent emanations constantly load the atmosphere are often the seat of the disease.

Many eminent authorities adduce apparently strong cases in demonstra-

[illegible] contagiousness while [illegible] observers take the contrary [illegible]. The latter are probably correct [illegible] there have been no absolute [illegible]nces of its contagiousness and the probabilities are against such an opinion. The disease seldom occurs twice in the same individual. Old, exposure to bad weather and to the heat of the sun, fatigue and general debilitating agencies act as exciting causes.

The materies morbi is supposed to exist in the blood, but its nature is as yet unrevealed.

A greater proportion of cases occurs in Autumn than during any other season of the year. A Typhoid condition frequently accompanies or follows severe inflammatory diseases.

Diagnosis. — The specific characters of this Fever taken in combination render the diagnosis not [illegible]

[illegible]. These are: the slow de-
ve[illegible], headache, suffused coun-
tena[illegible] inertia, epistaxis, abdominal
[illegible], peculiar eruption, diarrhea
[illegible] ochre-color dejections, the age
of the patient, any exciting cause to
which he may have been s[illegible]ected
and the absence of indica[illegible]
[illegible]her diseases. After the disease
has existed a certain time the diag-
nosis becomes less difficult if there be
no complication. Care must be
taken in excluding local diseases ex-
isting within the thorax and abdomen
and constitutional diseases accompa-
nied with fever. The natural his-
tory will avail to exclude Typhus.
Typhoid is much longer developing;
more common among the young, is
very slightly if at all contagious, has
abdominal lesions, while in Typhus
the reverse of these obtain. The stu-
por of Typhus is much more mark-

[illegible] eruption in typhoid & hyp-
[illegible] in typhus it is macular.
[illegible] latter constipation is ordi-
[illegible] resent instead of diarrhea
[illegible] the disease runs its course soon-
er. The absence of periodic paroxy-
sms of fever excludes malarial fe-
vers.

Prognosis.— The disease is not par-
ticularly fatal. Under proper man-
agement patients will very generally
be conducted safely through as it
yields readily to the influence of
remedies. No case, unless very far
advanced and [illegible] injudicious hy-
gienic regulation or seriously compli-
cated should be despaired of, as the
clinical records do not exhibit a spe-
cial fatality, at the same time the
practitioner should [illegible] vigilance
and caution to guard against com-
plications which may diminish the
vital powers and render recovery less

[illegible] follow. The liability to perf[illegible] of the intestines should al[illegible] [illegible]pt in mind. The prog[illegible] is unfavorable when there is [illegible] subsulis tendinum, difficult respiration, profuse diarrhea, tendency to coma, violent delerium, [illegible]ned action of the heart, great [illegible] [illegible]d when any active disease [illegible]its. Abatement of any of the more active symptoms, calmness of mind and body, increased tone of the vital functions and organs are favorable indications. Although the patient may linger a long time without manifest evidences of improvement recovery is still to be entertained.

Treatment. — Measures employed as abortive have not been [illegible] successful. Quinine, O[illegible] and the wet sheet when [illegible] the attack have been found to abate its severity and may be resorted to [illegible]

[illegible] propriety as no unpleasant re-
[illegible] follow their employment.
[illegible] have also been found to
[illegible] modifying influence.
[illegible] purgation is not admissible as
the inherent tendency to disorder
of the intestines would be [illegible]-
ted and the patient's stre[illegible] [illegible]-
promised to no purpose. Ca[illegible] Oil
or Magnesia in small doses may
employed to gently stimulate the bow-
els, but these are unnecessary when the
evacuations [illegible] natural and easy.
When the diarrhea is painful Lau-
danum may [illegible] given with a mild
laxative by the mouth or rectum.
Active congestion of any vital part
involving great danger may [illegible] re-
lieved by blood-letting [illegible] this
measure should be [illegible] with
great caution and only when imper-
atively demanded to abort inflam-
mation or other dangerous [illegible]

-[illegible] Local bleeding may be [illegible] at any stage to control [illegible]plication, such as Cerebral [illegible], Pneumonitis and active [in]flammation of other important organs, but less violent means should be substituted when practica[ble]. On the hypothesis that the blo[od is in a] state of super-alkalinity acids [have been] employed and with encouraging success. Sulphuric, Nitric, Muriatic and Phosphoric acids, well diluted, given in combination with Syrups are efficacious and not unpleasant to patients.

The Cephalalgia should be relieved by cold applications. Ice water, vinegar and aromatic washes will often suffice, but if it be still persistent and distressing [th]e douch or ice-cup sh[ould be] used. As the patient is apt [illegible] hair it may be prudent [illegible] the [illegible] to shave the head as it will contribute to his comfort and facilitate any applic[ation].

cations it may be necessary to make. When there is vomiting it can be regulated by dieting. The diarrhea unless [illegible] requires but little attention. Gum and Tannin may be used to allay irritation and check excessive discharges. If the bowels are [illegible] with flatus Lime water, Oil [illegible] or some mild laxative [illegible] be employed by the mouth or rectum. A wet bandage or Turpentine tapes over the abdomen are very useful as palliatives. Bleeding from the bowels should be restrained by mild astringents. As the secretions are usually diminished and the patient becomes distressed in consequence Mercury or Oil of Turpentine may be employed to advantage to [illegible] them. The latter is particularly [illegible] when the coating has peeled from the tongue and left it dry.

The subsultus, vigilance and other ner-

your symptoms may be relieved by Chloral, Hoffman's anodyne or other palliative.

[illegible] measures are of the first importance. Sponging the surface will serve the double purpose of relieving the heat and cleansing the skin. The bed chamber should be [illegible] ventilated, care being taken not to chill the patient, and all offensive odors should be immediately removed. The clothing should be changed as often as the condition of the patient will allow. Simple and sustaining food and alcoholic stimulants are especially serviceable. As there is such great waste of the fluids of the body the patient should be allowed plenty of [illegible] and agreeable drinks, which [illegible] are very acceptable. [illegible] or tea, animal broths, toast, wine whey, Tapioca, Sago, Arrow [illegible]

be given as nourishment.

As parts by exposed to pressure are liable to bed-sores the position of the ... should be changed as often as convenient in order to guard against this result. The bladder should be frequently emptied and the urine drawn with a catheter when found distended.

AN

Inaugural Dissertation

ON

Malaria.

SUBMITTED TO THE EXAMINATION

of the

Provost, Regents and Faculty

of

PHYSIC,

of the

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

Doctor of Medicine,

by

F. Asbury Pinckard

of

Lancaster County, Virginia.

Session 1866 & 1867.

Malaria - Marsh - miasma.

On the long catalogue of influences which so well acquit themselves if unchecked - in deteriorating the health and tending to degenetate the system of man which straining nature ever strives to sustain and nourish, but few seem more persistent and more frequently present especially in certain localities, than this subtle agent "Malaria," or if we give it another name generally regarded as its synonym, Marsh-miasma.

Malaria, in its literal sense means bad air; but used in its more extended signification, the word implies the product of decomposition of vegetable and animal substances. It is the effluvia of such

decay. To the action of this poison upon the human organism is ascribed the origin or primal cause of that harassing baneful, "dying-by-inches" disease-periodical fever-which, especially in my own section of country (East Va.) displays its invisible influences during all seasons of the year (more forcibly in some than in others, however manifesting but little if any partiality in the choice of its victims, sparing neither the young nor aged, the white or female.

The poison with stealthy steps and unsignalled march creeps through some of the most fertile and verdant regions of the South, despoiling the growth of her children and oftentimes leaving but

emaciated victims upon which other diseases may satiate their destructive appetites.

Debilitating in its effects, it often subjects the constitution to various disorders, and frequently, in proportion to the duration and severity of its attacks, inflicts anatomical lesions. There are some interesting and characteristic points in the consideration of this subject which require notice before we approach the results of malarial influences upon the human [illegible].

It is [illegible] that the [illegible] originating malarious diseases exists under some shape in the [illegible], and carries its deleterious principles through the respiratory organs and alimentary canal. This is

the mode of entering the system; but what causes "Malaria"? what are the elements or conditions essential to the generation of this endemic poison? Many hypotheses and speculations have sprung up, lived for a time and died only to be renewed.

Old learned men of ancient repute; men of modern times remarkable for strong reasoning powers; men whose judgment, comprehension and investigating talent have won them the enrolment of their names with distinction upon the historical pages of the Science of Medicine—have differed in the opinion of the combinations necessary to the birth of miasma. The ancients with Lancisi and Bancroft held that heat and moisture acting upon or with

vegetable substances in a state of decomposition were the chief agents in the production of the malarial poison. Indeed it was natural that such opinions should have been established, since vegetable putrefaction was nearly always an accompaniment of the presence of miasm manifested by the development of intermittent and remittent fevers.

Heat and moisture acting upon or in association with vegetable decomposition was their theory of malarial exhalations. This same theory has many advocates at the present day. Dr. Ferguson's views, he says set forth to prove that, while the products of vegetable decay may be concomitant with, they are not at all essential to the birth of those spores with which the aerial medium

is often so foully impregnated. Dr. Watson in concurrence with Dr. Ferguson's opinion endeavors to disabuse the mind of his class and general readers of the idea of vegetable decay as an element in the generation of this distemper. Many instances are quoted to corroborate the views of these two high authorities. In some of the examples illustrative of their opinions, it appears that the wind as a vehicle is sufficient to carry the poison from adjacent parts where streams or sources of moisture were present to places specified (by Dr. Watson) which were laden with it, even though no ingredients such as to the putrefying process could be discerned and in which there was no water found. There are, however,

other instances given in which there could be, it seems, no such influence acting, owing to the great distance of sources of water from the seat of the invisible though manifest and strong agent. Gathering all that can be derived from competent didactic authors in regard to the origin of malaria, it seems very plausible that temperature, moisture and peculiar earth or earthy material with or without vegetable decay though often there will be states of putrefaction in some form, while the naked eye may not be sufficiently well-sighted to detect them, that these are competent to the production of malarious spores. There may be some very peculiar state of the atmosphere which excites the process of miasmatic formation.

This peculiar state of the air avails but little so far as the success of the prosecution of the cause is concerned; as we are ignorant of the conditions upon which such state depends. Our eminent predecessors only hand down to young students of Medicine fasciculi of various speculations, since the cause or elements of malarial production are not demonstrable. We, like them, follow on in the broad expanse of hypothesis. Has the poison in substance ever been detected? Does it possess sufficient physical properties to render it perceptible to the eye with or without the microscope? The chemist ([illegible]) with the utmost care and precision has experimented in vain upon the atmosphere of the low wet, marshy lands in which the malarial

poison most thickly abounds. The strongest lenses of the keen-eyed microscope have searched with an eagerness and persistency, worthy of a better reward, but have failed in securing the faintest trace of this mysterious agency. Time, labor and expense have been consumed in such examinations as might lead to the capture of this essential and efficient, though evasive and inscrutible enemy of man; but in vain—the stone so eagerly sought is still missing. Labor, weary of futile results, for a time ceases.

But the science of Medicine is a progressive one, remaining but a short while at any one standpoint, especially if such status be enveloped in obscurity. There is continual advancement. Successively lights

spring forth from the deep and penetrating minds of her employees. Her devotees, stimulated by the hopeful prospect of future honors press onwards, onwards, enunciating causes and unknown effects, until, from a successful observer in reference to malarial Quinetal is heard. The ear of the Medical world has been patiently listening during the revival of its science, for the voice of one who can demonstrate the cause of malarial - the pestilence which produces intermittent fever which may be considered typical of its effects. Not only has it been traced to, but the particles source of this poison has been caught in its cell from which, under the cover of night it has sent forth, on the wings of humid air, into the chambers of his vitality, whom unconscious,

unsuspecting man knew not their secret approach-
exhalations which so pollute the air that
exposures is rendered unsafe and deleterious
and, in some localities even destructive to life.

Prof. J. H. Salisbury, after multiplied
and seemingly successful experiments, presents
through the Galveston Medical Journal
February and March nos. 1866 an article
in which he shows that with microscopical
aid he has been able to detect certain cells
which he terms "palmelloid" or "axial plants".
Observing this species of cell-growth in the
"expectorations of those laboring under inter-
mittent fever", he was led to other ingenious
investigations in which he, each time, dis-
-cerned this species of the lowest vegetable
origin. Not satisfied with the mere discov-

ceive of what he thought to be the cause of such fevers, he further experimented in order to verify the relation of cause and effect. Collecting several boxes of marshy surface-soil which had been observed to contain these palmellae, he placed them, about 100 yards above the level of streams, in the window of the room of two young men, in order that the particles - spores - might be set free by the wind and inhaled by the occupants of the room. The result was satisfactory, one of the young men suffering with a genuine attack of intermittent fever on the 13th, the other on the 14th day from the deposit of such boxes in the window. By the suspension of a glass plate over these boxes,

its lower surface was covered on the 5th. day; with these aquatic plants. In many places where the upper surface had become hard, and crust-like, beneath this, in the freshly exposed earth, these vegetable plants were abundantly found, in the form of saline incrustations. Upon the sides of ditches which had not been long dug; in the newly exposed surfaces of low wet grounds which had been plowed or otherwise turned up, these palmelloid growths were discovered. From the tone of Prof. Salisbury's language, as well as from the conditions under which his experiments were made, his doctrines of the cause of malaria would seem to coincide with the opinion, - the theory, that the temperature, moisture and earth

or earthy materials would generate a plant,
and from such newly created vegetable
would be given off sporules which reach
the circulatory system through the respir-
atory apparatus, and alimentary canal
in ingestion. That they enter the system
and are absorbed is shown from the presences
of these cryptogams in the urine and excre-
tations, the colors of these cryptogamic
growths are very various; being red, yellow,
greens, white or mixed. Since the development
of these plants are one in other situations
than those of a marshy character, Prof. S.
prefers the generic term "gemiasmal" (earth-
miasm) to that generally nominated "marsh
miasm". Whenever he approached places
in which these low vegetable plants were

present, he invariably experiences severe dry-
ness in the fauces, bronchial irritation
and subsequent fever. He thinks that the
respiratory organs are the points in the
economy which are first attacked, congestion
then being produced, followed secondarily
by similar results in other internal organs -
hence the repulsion of blood from the
surface so manifestly observable in the cold
stages of intermittents. I've never seen this
special dryness of the fauces &c. alluded to
by any writer on the subject of periodical
fevers. Prof. Salisbury's observations must be
practised by other investigators, in order that
their joint conclusions may corroborate the
theory of the cause of malaria - the prime
mother of periodical fevers and the willing

neighmate in the perfection of other disorders. If this theory prove a correct one it is very plausible, those palmelloid parasites or spores can be subdued whenever and wherever found by means of caustic lime, or by even covering the surface from which they spring with straw or other similar mechanical interventions to prevent exhalations.

Its corroboration by other medical minds will allay many of the controverting points now extant, and add much to the comprehension and treatment of diseases other than those strictly regarded as periodical. Then there will be, I think, much light shed upon the sources of many diseases whose origins are as yet, but mere conjectural speculations. Until verifications of such views as these of

Prof. S. is made satisfactory, so far as the prime cause of the poison is concerned, our minds must still linger at least in uncertainty. Though the causes of many diseases be unsatisfactorily appreciated, yet it is fortunate for patients, as well as for the philanthropy which characterizes the Medical profession, that the treatment, by symptoms and signs as they manifest themselves, can be more appreciably understood and regulated.

Having considered to some length, the cause of this fertile and common agent, malaria, it will now be necessary to notice what Dr. Watson terms its "habitats". These are numerous; but a knowledge of them is of much importance in the prophylactic as also in the interparoxysmal management

of the disorders to which it gives origin. "It loves the ground" so much indeed that individuals dwelling but a short distance above the general surface, in malarious districts, frequently escape, while those nearer the common level suffer from the morbid influences of this noxious substance. Persons inhabiting the lower stories of buildings are often the weary victims of periodical fevers, while their friends in the higher rooms of the same houses are unmolested. Febrile and other malarial complaints may be quite rife in the valleys, while occupants of neighboring hill-tops are quite free from endemic disturbances. This is no whimsical display of its action, but is the result of forces regulating its influence which will

presently be considered. Moisture absorbs it. While malarial fevers are in full activity on land, vessels lying in close proximity to the shore will be free from their assaults. The interposition of bodies of water is very frequently an accidental preventive to the action of the poison, though but few beyond the precincts of the Medical Science are aware of the benign efficacy of such waters. Residents on one side of a river may have no "chills & fevers," while those on the opposite bank are the frequent subjects of febrile visitations. The wind is the great and chief vehicle in the transmission of the morbific poison. Certain localities notorious for their "rank fevers" are often temporarily relieved from such pest, through currents of

wind, while adjacent sections popularly known as "healthy" become suddenly "sickly," through the visitation of the endemic agent. The sojourn of the poison in the latter places is however, only transient, since the next opposite wind will change it to its former quarter. The distance to which miasmatic particles can be transported seems to be about five miles. The fact that malaria is portable by the wind sometimes suggests the reason of its presence in those regions or sections heretofore relieved from miasmatic diseases. Owing to its strength, a current of wind may carry the poison along the borders or sides of mountains and thus deposit it; or it may carry it upon the top of the mountainous region, which is generally

free from such morbid agency. Trees, hedges and other similar mechanical interventions prove a useful and beneficial purpose of protection, if properly distanced from residences; but, if too near, they very often prove detri = mental by their mechanical entanglement of the malarious particles which are collected and then set free, in a larger and more concentrated quantity than otherwise, in the breathing atmosphere of the house. The very means, which at a proper distance prove prophylactic, at a too near location only heighten the exciting cause of disease. There are instances of this fact, in my personal experience, which I could give, but the limited space of this thesis prevents. After sunset and before sunrise are times between which,

in malarious districts, individuals should exercise caution in their exposure. If, from necessity, they immerge in the dense atmosphere existing between these specified periods, care should be taken; their bodies should be so protected as to allow no sensation of chilliness to annoy them. At night, the poison is far more intense in virulence than at any other time. This is due, doubtlessly, to the humidity of the air which is stronger and consequently holds the spores in more buoyant circulation; whereas, during the day the Solar heat dispersing the vapor of night causes the particles to settle to the earth from which they sprang. Since night favors the introduction of the poisonous matter into the system, those of weak and delicate constitution

should ever exercise extreme care in exposing themselves, as their incompetent natures may be unable throw off the "materies morbi," so readily as those of strong, firm and vigorous habits. All the eliminative functions being weakened, the zymotic cause from this fact, will linger in the system, liable to usher in established disease at any moment, and even though the paroxysms cease, often extreme states of impoverished blood - anemia - are left behind to render the patients miserable and unhappy. The stronger the vital energies of the system are, the less effective and deleterious will all morbific agents prove.

Periodicity of effects is the most characteristic feature in the phenomena of malaria. Thus, we have stated or regular paroxysms of

intermittent fever, which may come every other day, constituting the tertian type - the most common form. Or, if the exacerbations occur daily, the quotidian type is established; or, if they be absent for two days and successively return on the third day, the quartan variety is constituted. These are the principal forms in which malaria so periodically manifests its effects. Many attempts toward the explanation of such regular recurrent influence have been made; but none of them seems sufficiently logical and commendable to merit an insertion in these limited pages. The period of incubation is very variable. The poison, after its reception into the animal economy may lie dormant for weeks, months, even in some few instances for years, and

then suddenly manifest its presence. Or it may quickly develop disease ere one would imagine that sufficient time had elapsed for its re-ception into his system. Or, by what is recog-nised as its latent action, it may give rise to the complaint known as "dumb ague".
Visitors to malarious districts, though they be not the victims of the "ague" while in such sections, are almost sure to take home with them the poison which sooner or later reveals itself in disease. This leads to the consider-ation of its most frequent places of habitation.
In sections of country characterized by marshes, lowlands with wet soil, swamps, pools of water, boggy places situate at the heads of inlets or creeks making from rivers &c.-all subject to seasons of dryness, malaria will be most

abundantly produced. The Southern States, from this fact, will, as a general rule, be found more fertile in the generation of this effluvial matter than the Northern. The poison being more abundant and, consequently, more intense and concentrated, in these sections, the more severe and heightened will be the forms of fevers which it originates.

An individual may be attacked with the simplest form of intermittent fever in the course of the disease, the fever will often change from the intermittent to the remittent variety; from the latter to the continued form of fever; or the congestive or pernicious variety may be ushered in from the very commencement or follow some of the other forms. Very hot weather followed by rains insures the production

of the noxious agent in more rife quality and increased quantity. The latter part of summer and first of autumn and middle of spring whence the adjectives autumnal and vernal as applied to fevers of this source - are the seasons during which miasmatic diseases manifest themselves most abundantly.

After frost, but comparatively few people suffer from chills and fever. The fact is indeed notorious, and is conducive to the probable belief that malaria is of vegetable origin and nature, and seems to experience, pari passu, the same nipping hand upon its growth that flowers and other vegetable plants so visibly exhibit - Some few persons suffer from periodical fevers during the winter. This may be owing to the length of incubation,

the poison having been received into their systems during the summer or fall. Strangers are much more susceptible to its influence and even experience greater suffering than the natives or residents, from similar attacks. The residents of malarious sections are said to become acclimated to the poison. The deleterious influences of the agent are manifested in a chronic way upon these, while upon visitors or strangers they are acutely exhibited. It is a strange and unaccounted for truth that negroes seldom suffer from the common disorders engendered by miasmatic exhalations, while they are even more subjected than the whites to the influences which hasten and excite the operation of such poison. They are more exposed to inclement changes of weather - cold, dampness, rain, and

fatigue - than their superiors, the whites. Perhaps the plain but nutritive food which they eat undergoes free, normal digestion and proper assimilation; whereas, in the white man's pleasures of the table and other unessential indulgences, indigestion and consequent mal-assimilation and improper nourishment lend the predisposition to these exciting agencies. Of all the influences which incite the action of these malarious particles upon the organism, debility or those of a debilitating nature are the most fruitful. The poison will constantly linger in the system in a silent, dormant state, until it is suddenly kindled into effective activity by some of the ordinary causes, as exposure to cold from heat, excessive fatigue, and all other excesses which weaken the powers of resistance. Not unfrequently

it needs no helping hand to usher in its sometimes pernicious effects. I here allude to the congestive form of periodical fever. Let us now notice some of the anatomical lesions or imprints imputed to the action of this poison. Enlargement of the spleen-occasionally to an enormous degree- is the most frequent sequela of miasma. It has been found to increase from its weight of six ounces to two, four, six, eight and rarely ten pounds. One instance is given by Dr. Gray in which the spleen is said to have weighed twenty pounds. This immense increase is found, as a general rule, only in those cases in which patients have been the subjects of long continued attacks of fevers. Not only is the organ enlarged, but its substance, from

a normal soft consistence, sometimes becomes exceedingly indurated; though also from similar causes, it is so softened that it appears as a "dark pulpy mass destitute of organization." The splenic corpuscles undergo degeneration. The liver also suffers from malarious impressions. Its functions are deranged, its structure is changed from its natural firm and solid texture to that of an abnormal, very soft or friable character. There are many shades of difference in this pathological condition. Its color, from a reddish brown, is altered to that of a bronzed olive appearance. This is attributable to the accumulation of pigment matter in the vascular apparatus. These organs seem to suffer more from the operation of this powerfully

noxious agent than any of the others. This is accounted for by the repeated congestions to which these highly vascular glands are subjected during the cold stages of malarious fevers, at which time the blood is driven from the surface to the internal organs. Does the poison itself, irritating the organs cause hyperaemia of the same? Is not the blood, from irritation of these organs, drawn from other organs and the cutaneous circulation to these? I do not think it can be denied.

The poison is the irritating cause of such congestion. If these organs, from repeated congestions and accumulations of miasmatic sporules, become obstructed, effusion of serum into the peritoneal cavity, or ascites, is the result. These pathological conditions are

partly direct and partly indirect effects of malaria. Besides the regular fevers,- intermittent, remittent, congestive, typho-malarial, and perhaps, Yellow, it gives rise to neuralgia of a periodic nature. In addition to these characterized diseases a state of general malarial cachexia is induced. There will be, from continued exposure to malaria, brought about that condition in which the red globules are diminished in undue proportion to the fluid mass of the blood,- in which the pale surface, cold extremities, general lassitude mental despondency, with symptoms which may (if the patient be of a nervous nature) imitate almost every variety of disease,- in other words anemia. In this condition we can frequently detect, by auscultation, the

soft systolic bellows-sound extending up the aorta, and in the subclavian and carotid arteries, sometimes also the cooing murmur in the jugular veins. Subjected to these frightful symptoms and signs, the tortured man believes himself the victim of fatal organic disease, unless he be quieted by his Medical adviser who may be able to appreciate the true state of the case. This strong and manifested debility, if not checked, will lay the foundation upon which some latent disease may work destruction. Diarrhoea, dysentery and other complaints are recognised as results of the same exposure. Having considered some of the most prominent effects of this common scourge Malaria, it will be proper to glance at the general plan of treatment of its diseases.

Persons living in malarious climates, especially those of weak habits, should not stir about in the open air until their morning meal has been taken; otherwise their systems possessing at this period of the 24 hours the greatest absorptive and least resistant power, will be more liable to incur the morbific influences of the atmosphere. For neutralizing the influence of the malarious poison, Sulphate of Quinia is the great remedy - the sheet anchor. During the paroxysm of an attack of intermittent fever but little active treatment is necessary. Immediately after such exacerbation, Sulphate of Quinia or other preparations of Cinchona should be administered in small doses until cinchonism, manifested by tinnitus aurium, is produced. In the congestive form,

it will be necessary to administer immense (comparatively) doses of the drug, either by the mouth, or if deglutition be impracticable, by the hypodermic method, or enema; counter-irritation to the feet and revulsion generally; all treatment being directed as the given indications require. In the remittent form mild purgatives in addition to Quinia are necessary. In the hot stages of these fevers ice, lemonade and other cool drinks to allay thirst should be allowed.

Neuralgia and anemia are treated upon general principles, giving especially Quinia or other preparations of bark, iron and other tonics. It is not my province to speak further of the treatment of the diseases of this common poison malaria. Already,

I fear, gentlemen of the Faculty of the University of Maryland, I have trespassed on your time too long. Asking your kind and indulgent criticism in the examination of this paper which I pass to your keeping, let me wish you individually, as Professors, a long and happy life, and as a Faculty under whose tuition, I trust, my time has not been idly spent the fairest success in the advancement of the Science and Art of Medicine.

Respectfully submitted

F. Asbury Pinckard

Va.

On

Inaugural Dissertation

on

Hernia

Submitted to the Examination

of the

Board of Trustees of Physic

of the

University of Maryland

School of Medicine

for the Degree of Doctor of Medicine

by

[illegible]

[illegible]

[illegible]

Hernia

By this term is meant the protrusion of a viscus from its natural cavity, the sense in which it is generally used however is confined to the abdominal cavity more particularly and means a protrusion of any viscus in that cavity, through any natural or forced apperture,

As we shall confine our subsequent remarkes more particularly to Inguinal Hernia it would be better probably to take a survey of the anatomy of the parts more immediately concerned with the disease. In examining that portion of the abdomen of which we shall speak after the

Removal of the integument and super-ficial facia which cover the abdomen we come to the muscles, the first of which is the External oblique next the Internal oblique and then the next muscle the Transversalis, Beneath these muscles and next to the Transver-salis we find a thin layer of airolar tissue, the Transversalis facia and then a serous membrane the Peritoneum situated at the lower part of the abd-omen, and particularly connected with the Parity of Hernia. On each side of it are two [illegible] Channels, called respectively the, External and Internal Abdominal Rings, [illegible]

and internal from the center towards the surface but the reverse with regards to the median line, the external abdominal ring is an opening somewhat triangular in its shape situated just above the crest of the os-pubis formed by the separation of the aponeurotic expansion of the fibers of the external oblique muscle having its apex looking obliquely upwards and outwards its base downwards and somewhat inwards formed by the crest of the pelvis, the sides of the ring are formed by fibres of the same muscle arranged in columns or pills and hence called the pillars of the ring, the one

external being inserted into the spine
of the pubis the other internal meeting
its fellow of the opposite side over the
symphysis, the ring thus formed is
situated about an inch from the
symphysis. To describe the internal
abdominal ring we must allude to
the descent of the testicle in the Fetus
between the fourth and fifth months
of intra-uterine existence about this time
of fœtal life the testicle begins its
descent from the side of the kidney
and seeks a passage through
which it may reach its final dest-
-ination the scrotum which it
accomplishes about the seventh month

of ~~e~~tro-gestation, the testicle in its descent passes [illegible] the Pyramidalis muscle to a point in the abdominal parietes thinner than elsewhere on account of the absence of the Internal oblique and transversalis muscles, this point where the testicle strikes the external oblique muscle is called the external abuttment having reached this point it [illegible] comes in contact with the Peritoneum and transversalis fascia as these membranes are between the abdominal walls and their contents, and carries them before it in its descent unable to pierce the abuttment [illegible] [illegible] [illegible]

through it into the scrotum the trans-
versalis fascia [illegible] [illegible] them
is the Tunica Propria, the Peritoneum
becoming the Tunica Vaginalis as
the testicle passes down the canal
of course it brings down after it
the Spermatic cord from when the
spermatic is embraced first by the
Peritoneum and opposite this [illegible]
-nal [illegible] the fascia transversalis
comes lies loos, And exactly at this
point where the testicle first attem-
-pted to pierce it, is situated the inter-
-nal abdominal ring formed by
the transversalis lying loos but
the Peritoneum forming [illegible]

the cord this latter however does not always happen, sometimes it does not shrink to the cord and under such circumstances congenital hernia is inevitable hence the only safe guard against this kind of hernia is the shrinking of the Peri-toneum to the cord, this [illegible] kind of hernia, 1st [illegible] situation 2nd according to the protr-uded viscera which may be reducible or susceptible of being returned into its natural cavity, irreducible which us will not be returned, or it may be strangulated state of the protruded viscera is somewhat constricted which

not only preventis its being returned
but also obstructs the circulation
and the passage of [illegible]
[illegible] the [illegible] four
varieties, the Direct Indirect or obli-
que, Congenital and Encysted,
the Indirect or oblique hernia tak-
es in its passage to the scrotum
exactly the same rout as the testicle
does, the gut in discending first reaches
the internal abdominal ring receiving
first a covering from the perito-
neum next the transversalis facia
then the cremaster muscle and
finally the intercolumner facia
or that which is the same thing some

fibres from the external abdominal
ring, the relations of the internal epi-
gastric artery and spermatic cord
to the neck of the sac in this variety
of hernia are sometimes different
It is laid down as a rule however
by Velpeau, that the internal epigastric
artery is always internal to the neck
of the sac and the spermatic cord
generally behind the sac,
In Direct Hernia the gut forms a
more direct point than in the Ind-
irect bursting through the conjoi-
ned tendon of the Internal oblique and
Transversalis Muscles or what is more
frequently it pushes in before it carries

for its coverings first Peritoneum next
Transversalis facia here however
the similarity existing in the cover-
ings of the two kindes of Hernia ceas-
-ses the Direct hernia has no crem
-aster muscle for one of its coverings
as the Indirect had the Direct has
insted the conjoined tendon just
spoken of here, the Direct in passing
through the external abdominal ring
receives the intercolumnar facia
which couting the Indirect had
also received we can then
appriciate the termes, Direct
and Indirect one comeing directly
through the internal abdominal

ring the other passing first through the internal abdominal ring down the inguinal canal and out at the external abdominal ring, theas two kinds of Hernia viz. Direct and Indirect are called indiscriminately Bubonocele; and when they have reached the scrotum they are called scrotal Hernia. Diagnosis, founded, first on the different [illegible] of the tumor i.e. in the direct there [illegible] a [illegible] form not increasing so rapidly as in the Indirect, and the [illegible] [illegible] [illegible] [illegible] and the pressure on the inguinal canal which would only take place in the Indirect as the

Direct does not descend along the back

of the position of the plan the one

in the Indirect being placed behind

the protruded gut, In the Direct

it is also most behind but rather

more to one side. In the Indirect

neck of the tumor inclines upwards

and outwards along the inguinal

canal causing a fulness as

far up as the middle of the back

ligament. In Direct hernia it is

inclined rather inwards and after

the hernia has been reduced

the finger may be passed di-

rectly back through the opening. —

It is said in old cases the diagnosis is

excessively difficult, we distinguish
this kind of hernia Direct from
Vericocele by the disappearance of the
tumor when the patient is lying
in a horzontal position but this
[illegible] occurs under similar circum-
stances in vericocele hence when or
rather before the patient arises
[illegible] your finger upon the exter-
[illegible] [illegible] [illegible] [illegible]
[illegible] not escape while the pressure
is continued but if it be vericocele
the size of the tumor will be rather
increased than diminished by the
pressure again in hernia the tumor
is [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

... is Varicocele it presents ... a mass or bundle of tightly distended vains, Regarding the cause of Varicocele we have two theories advanced,

1st that it was caused by pressure of the sigmoid flexure containing ... upon the spermatic vains

2nd that the enlargement was caused by the blood before it reaches the Vena cava having to ascend and ... into a vane at right angles with it ... this latter ... has been disproved by late physiological reserches which go to prove that the circulation instead

being retarded by its being com-
pled to take such a course is rather
accelerated hence the first theory
if not the correct one appeares at
least to be the more plausible we
[illegible]
[illegible] Hernia from Hydrocele
which is an accumulation of water
or serum in the serous membrane
of the testicle or in the Tunica Vagin-
alis this is easily done from the fact
that its being an accumulation
of water it must necessarily be in
at the bottom of the scrotum and
extend upwards and also by its
semitransparency and fluctuating [illegible]

by not dilating on coughing preven-
ting the testicle from being clearly
felt and the cord may be felt above
it, [illegible] from
the characteristics of hernia but,
Hernia may and does sometimes
exist with hydrocele, Hernia beg-
ining from above and descending
Hydrocele from below and ascen-
ding, Hydrocele of the cord sometimes
demands our attention; "Druitt in
in speaking of the sacs if [illegible]
it may be distinguished by its
transparency and fluctuation but
if high up it may extend into the
abdominal ring and [illegible]

impulse on coughing and the diag-
-nosis may be difficult, But as
[illegible]
this kind of tumor the rule when in
doubt an operation should be
performed in case of symptoms
of strangulation,
Treatment after we have determe-
-ned the variety of Hernia we first
resort to a manual operation
technically called Taxis, The patient
should lie down on his back with
his shoulders elevated by [illegible]
the bladder should be emptied of
[illegible] the thighs [illegible] upon
[illegible] so that all the muscles and

ligaments of the parts may be relax-
ed as much as possible. He then
should be engaged in some pleasant
conversation with an assistant
at the time so as to prevent him
from straining with his respiratory
muscles, then the surgeon should
grasp the tumor [illegible] be [illegible]
and with boath hands squeezing
it gently if possible to remove some
of the contents or flatus pushes it
in to the [illegible] of the neck [illegible]
and with his fingers gently squee-
zes the parts at the neck of the
tumor at the same time [illegible]
still [illegible] in order to dislodge

it this operation may be contin-
ued for 15 or 20 minutes or an hour
or [illegible] times much sooner if the tumor
is not so tender as [illegible] to the gratifica-
-tion of the Surgeon the parts will
be easily returned with a [illegible]
noise, If the Taxis of its self do not
succeed we are then to resort to cer-
-tain auxiliary measures such as
[illegible] emetics but the cold appli-
-cations externally to the tumor, opium
has been highly recommended and
in extreme cases Tobacco enema may
be tryed but this is a dangerous
remedy and should only be resorted
to after due consideration but to the

-udency of chloroform much credit is

... in the reduction of painful

... strangulated hernia,

It is said that in old standing cases

that the surgeon may be justifiable

in trying taxis a much longer time

aided by the remedies just spoken

of but if the hernia be in a young

subject too much time should not

be lost before considering the prop-

riety of an operation, and

I think the propriety of such a course

occurs to me very forcibly in case

which came under my observation

not a great while ago a gentleman

who had been laboring under Ingu-

-inal Hernia for about two years and
who had been in the habit of returning
his hernia himself without assist-
ance but [illegible] a truss
which prevented its being of much
inconvenience to him but after a
lapse of time he became tired of
wearing his truss and layed it aside
not regarding his malady in that
light which he should have done and
one day he was suddenly seized with
strangulation, when my preceptor
was called to see him and in this
case it was my privilage to accom-
pany him to see the patient upon
his arrival he commenced the operation

of taxis and after trying sometime
assisted by some of the remedies of
which we have mentioned in a nother
place, he then found that it would
be utterly impossible to make any
decided change in the apperance
of the parts or to give the patient
any relief, The next day several
other medical gentlemen were called
in consultation to aid in the reduc-
tion of the hernia and after
mature consideration of all the
circumstances connected with the
case it was agreed upon by them
to perform an operation. The nature
of the case was said open to the patient

and he most readily agreed to the performance of the operation every thing was then prepared and the patient ready the operation was commenced and after the first or second incision was made we were somewhat surprised to find no distinct layer or layers could be found after further disection we found that the ordinary membranes which should have presented themselves detached were all adhearent to each other and they to the sac of the tumor and the condition of the parts already alluded to was very discourraging particularly to

the operator but after reaching the one of the tumor it was found that putrification had already comenced and the knife was willingly resigned leaving the patient in "Articulo Mortis" who died in about four hours,

If Inguinal Hernia be of the reducible kind and after its reduction a truss should be constantly worn the pad should press on the internal abdominal ring and upon part of the canal the spring of the truss should pass round midway between the trochanter and crest of the ilium care should be taken to

maintain the pad in its position as well as possible otherwise parts may be pressed upon such as the pubis or Spermatic Cord which if should so press might occasion the patient great pain. Various plans have been suggested by eminent men for the radical cure of Hernia but we will not enter into a discussion of them here, The ordinary operation consists in first shaving the skin being drawn tense by the fingers an incision three or four inches long is made through the skin along the axis of the tumor, the parts as they present them-selves

ure to be carefully finished off with
a pair of scissors cut merely in a
horizontal direction a director
should be then introduced and
such taper managed as this was
should be divided to the length of
the first incision until you reach
the sac. great care should be obs-
erved in the division of the sac
other-wise the intestans might be
injured, After the sac has been
opened the Surgeon should intro-
duce his finger to ascertain what
the stricture is when he has fou-
nd it he then introduces a blunt
pointed curved bistoury (figure

it flat on the finger under the stricture, and as a general rule ... upwards ... dividing ... in either verity avoid the ... the wound is then to be treated as in ordinary cases and ... means used to prevent a recurrence of the malady.

AN

Inaugural Dissertation

ON

The

Formation of Medical Character

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

F. K. Landon

Of

Maryland

Session of 1866—7

It is forsooth
An easy thing to stand aloof from pain,
And lavish exhortation and advice
On one vexed sorely by it.—

Mrs Browning—

Man in the construction of his body, resembles an intricate mathematical problem, the irregularities of whose figure, and the multiplicity of whose lines, and angles, collectively bewilder the mind of the Student:— but when he seizes upon and defines the distinct bearing of each of its angles, and traces the direction of its numerous lines, he discovers a design in every part, and a perfection in the whole, that at once astonishes, delights, and instructs him—

Man is an epitome of Creation; he combines in himself and endless variety of mind, and a thousand modifications of matter, In his physical nature, he is closely connected with earthly objects, and in his mental powers he closely approximates those beings that

inhabit the "realms above" In him the Creator has united strength and debility, mortality and immortality, in short every variety of "created nature" Consequently the study of his system, and the diseases which his mind and body are "heir to", present a wide field of observation to the Medical philosopher; and he who wishes to be ranked among the number of true physicians and Surgeons must not rest satisfied with a mere negative knowledge of man, but must study and that closely his General and Special Anatomy, as well as the various Pathological changes and conditions to which his system is subject And now that Physiology is the "True basis of Rational Medicine," and the microscope with its all-seeing eye, has pried into secrets hitherto unknown, he must know that in the Human Body organs exist, organs of whose existance the natural eye has no conception- that these organs have their own organization and actions, and that by them the body is nourished—

If then Man be such a complex being - and if there be a constant struggle going on within him, between deleterious agents and the vital resistance, - and daily observation proves the fact - it is easy for us to conceive how Medicine originated - "Necessity the mother of Invention" prompted it, and benevolence, philanthropy and learning have ever since cultivated and cherished it. In its youth it was known as an art, but now in this age of wonders, it ranks, and that deservedly, among the Chief of Sciences. And when we consider the object of medicine we are not surprised that it should have enlisted in its ranks so many of the master minds of every age, for among the numerous professions, none equal it in benevolence of purpose - Its subject is the human system, and its objects the relief of pain, the mitigation of suffering and the promotion of Human happiness - Hence the dignity of Medicine, and the respect that has always been shown its liberal cultivators

If we begin at the time of Hippocrates and examine the state of Medical Science down to these more favored days, we shall find scattered along its ranks, at intervals not distant many meteor lights, whose genious dazzled the eyes of the world, and whose profound researches and rich and beautiful productions, have caused their names to be enrolled in the archives of the temple of Fame. All men cannot be of this high order, for genious is a gift, and there are others whose characters, and whose earnest searchings after truth, are in every way worthy of imitation. But though the profession can boast of many good and great men, yet, and with sorrow be it said, that many are now called by the once dignified though now much degraded appellation of Doctor, who are neither qualified by nature nor educated to perform the sacred duties imposed upon the physician

As the dignity and usefulness of Medicine depend in a very great degree upon the character of those who cultivate it, we propose an examination of the traits of character and the proper slow course of study requisite to its honorable and successful pursuit——

Many, even now, think that medicine can be successfully cultivated without much previous training of mind, but surely this idea has arisen from want of due reflection upon the subject; for there is no profession more comprehensive in its nature, more accurate in its investigations or more varied in its application——

In its mode of development and growth the human system is governed by immutable laws, nor is its mechanism and structure perfectly analogous in all subjects. Abnormal conditions of the minor and more important organs often exist, and these departures not unfrequently produce changes in the mode of combinations of the elements

in the lower of the vital forces, in short of the healthy functions of many other organs in the system. So that to understand all the the changes that are taking place in the animal economy, will require in the physician years of study - of observation and of reflection — Medicine is wide and excursive in its researches to benefit man. The "land and sea" are taught to yield up their sanative products, the animal and vegetable kingdoms are laid under contribution, and are forced to replenish the Materia Medica. Now if our statements with regard to the complexity of the human system be true, and if the comprehensiveness of Medicine, be beyond dispute, then it must be evident, we think, to the most superficial observer, that there is scarcely a collateral branch of learning that may not prove useful to the physician Mechanical Philosophy, so comprehensive and profound in its nature, so beautiful and varied in its subjects, should be an object of study not only to the professional man

but to every one who makes any pretentions
to the pursuit of scientific knowledge-
But in order to understand the principles
of Philosophy a knowledge of the exact
science is necessary; so the successful
pursuit of the former, necessarily involves
a study of the latter - Few men are naturally
close thinkers - and the study of the exact
science invigorates and systematizes the mind,
and imparts to it habits of energetic think-
ing and reasoning - These statements we are
aware are doubted by many - It has been said
that men who reason well in mathematics are
in other respects inferior to ordinary men, that
their minds flow in one channel, and that on
this subject alone are they capable of profound
reasoning - but we cannot coincide in this opin-
ion, who believe and know, that men accustomed
to physical labor, can endure more fatigue
and accomplish more of any kind of bodily
work, than those wholly unaccustomed to
labor - and does not the mind become vigorous
by exercise as well as the body? - And when

a mathematician is found deficient on ordinary subjects, it is doubtless owing, not to his inability to master them, but from his exclusive devotion to his favorite study—

From the intimate connection existing between the mind and the body, the study of Metaphysics claims the attention of the physician. for however accurate of knowledge of man might be considered,- yet without a correct idea of "the play of Sympathies," existing between the mental and physical portions of his nature, it would be very deficient—

The body and mind may be rudely likened to a chariot and its occupant— the latter which is travelling through life in the former, whose movements are under the volition of the mind; so that to have a perfect understanding of the whole, we must study the habitudes of the occupant as well as the nature of the chariot.

History- Biography- Moral Philosophy- Natural History- Political Economy- Laws of Nations and especially of his own country- Poetry and

Polite Literature generally, are worthy the attention of the Candidate for Medical Honors;- in short "he should be at home" on all general subjects which may interest an intelligent Company, "whether social or political- foreign or domestic- or relating to the past present or future" Many of the branches enumerated are not directly connected with Medicine, but they are worthy of perusal, because the community at large, and especially those of that community, who are intelligent judges of the abilities of professional men by the number of their accomplishments and their acquaintance with general literature.

How great is the benefit derived from a thorough understanding of the Latin and Greek languages, those monuments of departed greatness:- It is incalculable, for medicine can never be studied with a hope of perfect success without this knowledge- Some dispute this, but their opinions are heeded and respected as little as a whirlwind heeds the voice of man- and they thereby meet a just reward- Reason and thought

will convince us that it should not be otherwise-
Was not Medicine first given to the world in
a now dead tongue, and should not the doctor
of today be able to hold converse as it were
with those disciples of old, through the medium
of those tongues? No man doing justice to the
Profession can answer these questions in the
negative- In Physiology, Metaphysics and
Mathematics, the ancients were our equals
if not our superiors- Point to the poet of later
days who can be compared with Virgil, for
elegance and chastity of language and rich-
ness and variety of subject, or with Homer for
fidelity and impetuosity of genius, sublim-
ity of thought, and felicity of expression
Do the histories now rank with the works of
Sallust or Caesar or with those of Xenephon
Livy or Herodotus- Lives there a man who
would not rejoice more than words could tell,
in being called the Cicero or Demosthenes of
today- Grecian and Roman Literature are
caskets of jewels, from which the modern
writers have plucked many of their brightest thoughts

When our own language has not been able to supply us with words directly expressive of the meaning wished to be conveyed, such as the technicalities, the Latin and Greek have invariably come to our assistance, for indeed most of our Medical terms are of Latin derivation, which fact alone proves the necessity of a knowledge of them to the physician. It cannot be denied that a knowledge of this kind assists the Student, while a want of it retards him mightily, for he is continually buried among the leaves of a medical dictionary, searching for the "big words" which now fill our books. And even after his eye rests upon the looked for word, and he sees the meaning laid down in the dictionary, he does not fully understand it, for he is not acquainted with the language from which it is derived. As Medical Science be[illegible] comprehensive in its nature, or be[illegible] deep in its researches, that it should be deprived of learning deemed requisite to the study of such professions as Law or Theology? Are not the

health happiness and lives of the human family worthy the undivided attention of the liberal and cultivated mind. We are aware that most of all the works of noted authors have been converted into our own tongue, but no translation can convey the purity and beauty of an original. The facility of words, the ease and grace of languages, and the familiarity with ancient character acquired by the student of Latin and Greek, are advantages and accomplishments not to be despised, And as much useful knowledge may be acquired, and as many important discoveries are daily being made by the members of the profession on Continental Europe. a knowledge of their languages assists and gives confidence to the student. for it is a noted fact that education inspires confidence. We know that what we have said respecting a comprehensive course of preparatory study is with many a marked unpopular hobby. but as peace has again returned. and the press at least is free. and as these are our own honest opinions we avail

to expulse them. There are many who would
be willing to bring the noble profession down to
the level with Mechanic Arts, and what is still
more to be lamented, some of these simplifiers
and degraders of all and every Science have
been admitted as practitioners of Medicine,
though we are happy to state that as far as
our own observation goes, they have thus far
been unsuccessful - and may they ever be -
Why are these men so bitterly opposed to liberal
and comprehensive preparatory studies? The se-
cret of their opposition is we think easily
discoverable - They are themselves ignorant of
them and consequently condemn them in others,
but let them "pluck first the mote from their
own eyes" - And moreover they strive not from
a love of the Science, but from a love of money
and they often succeed, for how long ago was made
manifest, that "the world is easily duped" - They
have as their motto - "presents a solemn face,
a silent tongue, looking wise and guess" -
It cannot be denied that some physicians
have a greater share of Medical tact than

others for Dr Gross remarks "Surgeons are born not made" - but this is a point we beg to be relieved from descanting upon - We think it not sacrilegious that the motto of a physician should be the scriptural advice "read pray and meditate" - for medicine is a progressive science, and the indefatigable exertions of the profession are daily bringing to light new facts in pathology and Practice - Chemistry and Botany - the bases of Materia Medica - Physiology and Medical Jurisprudence are constantly undergoing changes - Every new discovery in Chemistry produces a "new era" in Materia Medica and in Physiology and another step is taken towards removing the veil, that shrouds the mysterious workings in the "inner court of the temple of Nature" - These facts show that habits of persevering industry, and close attention, united with a well disciplined mind are necessary to renown in Medicine -

The motives that induce young men to embark in professional studies, are in many instances the causes of their failure in after life

Some are influenced by a desire to please friends, or are led on by a hope of easily attaining honor or wealth - or perhaps ambition spurs them on" Each of these are laudable enough with proper restrictions, though in themselves they want permanency and efficacy - These may tempt and stimulate the student for a while, but their beauty soon withers away, and leaves their votary languishing amid desolation and ruin - But let a young man select a profession, not merely as a source from whence to gain his livlihood, but because it is congenial with his taste, let him pursue it with "all due diligence", let him have as a goal for which to strive - a way in which he can most benefit mankind, and his efforts will most surely be crowned with success, as they will redound to his honor and glory - How happens it that some men take such a firm hold upon the wealth, the honors, and the affections of the world? Is it because Nature in the distribution of her gifts has favored them above others or is it because they have labored vigorously and manfully to overcome difficulties, and

have by all honorable means endeavored to render themselves worthy the respect and esteem of their fellow men- surely the latter is the recent of their success-

An opinion generally prevails, that men of inferior talent and education, will answer as practitioners of Medicine in the country- But no conscientious man could solace themselves with such reasoning and no man of principle, or of true benevolence of Character, could be so influenced by these opinions as to lull himself into lazy habits, and forgetfulness of his duty- Surely the life of an honest planter is as dear to him, as that of the nabob of a crouded city- The duties of a Country Doctor involve if anything a more intimate acquaintance with the various branches of Medicine, for in the city the practice of medicine is in effect divided into distinct branches, while in the country the one doctor must be master of all- This opinion has arisen we doubt not from the following- The country is crouded with illiterate Physicians, because in the city there are so many master

master minds which from them the practice they had undeservedly obtained, and they prefer, rather than make an honest living in some other way, to pursue their guessing game among the simple hearted people of the country.- If the object be merely to get business, or to accumulate wealth, then indeed the idea may be tenable, but the practice of Medicine can never be on its true footing while regarded merely in the light of a profitable business." The Physician should cherish a professional spirit, which looks to the honor of his calling as identical with his own, which shrinks from whatever would disgrace it as from the touch of infamy, and flushes with a proud complacency at every new acquisition to its general credit." Every man who intends to make the practice of Medicine, the business of his life should cultivate a spirit of free thinking and investigation- he should not perhaps adopt the opinions of any man, without first examining or at least considering for himself,- for it cannot be doubted that the weight of great names, and the dogmas of Schools have established a kind of despotism over the mind, which has in many instances proved detrimental to the Cause of Medicine-

The physician should be a historian of Nature - he should note carefully all it phenomena and compare his observations, with those recorded by his predecessors he should mark carefully its discrepances, and then the whole should be subjected to analysis and useful conclusions drawn therefrom. The correctness of his diagnosis, depends much upon the manner in which he interrogates Nature, and the attention he gives to her answers for "Nature speaks the truth" - Some forms of disease require all the energies of a cultivated mind and matured judgment to detect them - so that all the means of diagnosis should be strictly attended to, and the examination should be regular, deliberate, and methodical, for in this is "the experienced and well qualified physician distinguished from the mere hap-hazzard doctor" - When young men enter the Medical Profession with proper views of its extent and variety, and of the varied duties that will devolve upon them; and cultivate it with the ardor its importance demands, they can scarcely fail of success - Let all candidates for Medical honors be courteous and cheerful, honorable and dignified in all their intercourse with men, and when they become physicians let

them do what they conceive during their most philanthropic moments of reflection, would best promote the interests of their patients, and the welfare of the community in which they live. Let them do nothing but what would redound to the dignity and usefulness of their Profession. And although the Golden Age of Medical triumph, or the Millenium Glory of Medicine predicted by some physicians, should not arise during their lives, yet they will have the consolation of having acted the part of a philanthropist, and will have little cause to regret the course pursued during their medical life. For we believe that he who has extended his hand, to snatch as it were from the very jaws of death", the prostrate form of the dying man. and has thus dispeled the gloom that hangs o'er the sorrowing brow. as the timely shower revives the face of drooping nature, and causes again the "little blade of grass" to lift its head. he who has discharged the important part of a physician with dignity and honor. has spread peace and happiness among his fellow men. knows what true happiness is. Would Oriental magnificence, or a lifetime of Sensuality or Indulgence be a fair exchange for this his virtuous joy,—

Thus is my Thesis finished, and committed to the examination of the Faculty with fear and trembling, for I feel deeply its imperfections. And I can only ask each and all of the Faculty of the University of Maryland, who may honor the author by a perusal of these lines, to bear constantly in mind his slight acquaintance with the prescribed rules of composition, and above all his slight experience as a Medical Man. But acting on the principle, embodied in the cant adage of "auld lang syne", that "necessity knows no law", I have penned the foregoing keeping always, constantly, before me the fact that it is easier to preach than to practice.

And hoping most sincerely Gentlemen

that you will not "view me with a critics eye
But pass my imperfections by"

I have the honor to subscribe

Myself - Yours most Obediently

B R Davidson

Md -

AN

Inaugural Dissertation

ON

Aneurism.

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

W. B. Forman

Of

Florida

Session of 18 67

Aneurism.

An aneurism of an artery is a sack or tumor formed in the artery and filled with blood, caused by the rupture or dilatation of this vessel. The dilatation may either extend entirely around or only a portion of the artery. General dilatation differs from true aneurism in having a broader and more ill defined base. In the structure of the artery we find three coatsor tunics, viz; an internal serous tunic which is continuous with the endocardium. a middle tunic composed of elastic and muscular fibres; and an external or cellular

coat composed of muscular tissue.
The anatomical difference between the smaller and larger arteries consists in the structure of the middle coats.
In the smaller arteries this coat is muscular, the fibres being arranged in a circular manner. Hence their great power of contractility, and want of elasticity.
In arteries of medium size the middle coat is composed of both elastic and contractile tissue; while in the arteries of large calibre it consists of elastic tissue alone.
The chief varieties of this tissue are: the true, false and mixed

aneurisms. In true aneurism the sack has for its covering all the tunics of the artery. When the sack has only the outer tunic for a covering, the inner or middle coat or both having been ruptured, it is termed false aneurism. Spurious aneurism is that form of the disease in which all the tunics after expanding before the impulse of the blood finally give way; and Hemorrhage is the result. — Pathology.

Aneurism may be either spontaneous or traumatic. When spontaneous it begins

with the formation of calcareous or earthy deposit on the inner walls of the artery. The blood owing to its altered condition is unable to remove this deposit and therefore expends its force on the resisting walls which give way to pressure, until the dilating process if not arrested. The inner coats are soon absorbed; leaving only the outer coat which is greatly distended and becomes also very thin. The disease may also commence at some diseased spot of the inner wall, and all the coverings give to the continued pressure of blood

Symptoms. If the tumor be seated in the neck or trunk it produces a pulsation synchronous with that of the artery: it being always found in the course of the artery. A blowing sound is also heard over the tumor upon applying the ear to it, which is called the aneurismal bruit. When the tumor is small pressure on the artery between it and the heart causes it to become placid at first and if continued it will disappear entirely. Upon removing the pressure the blood is heard to rush into the tumor with a vibratory sound.

The tumor in its beginning is entirely free from pain but as it progresses the pain becomes excruciating, the nerves in the surrounding parts being put upon the stretch. In thoracic aneurism there is an unnatural throbbing pulsation, of which the patient is sensible and which is detectable by the stethoscope. If seated in the abdomen it can be felt through the abdominal parietes In thoracic aneurism the respiration and circulation are interfered with. Diagnosis. Aneurism may be distinguished from other tumors situated along the course

of the arteries by noticing 1st. That
an aneurism begins to pulsate
when it is forming, which is not
the case with other tumors.
2ndly. That the tumor will
cease to beat when raised from
the artery if it be not an aneurism.
3rdly. The aneurism is soft at first,
becoming hard as it progresses,
while the reverse holds true with
regard to other tumors. 4thly. Aneu-
risms are reduced by pressure on
them, other tumors are not. 5thly.
It may be distinguished from abscess
of the Psoas muscle, by its freedom
from pain when forming, and its
remaining the same in any

position the patient may assume. . . . It may be distinguished from enlargement of the thyroid gland, by its remaining stationary in the act of deglutition, while the gland follows the movements of the larynx.

Progress. - The disease usually has its origin at the inner tunic of the artery, the walls becoming thinner as the tumor increases. The walls though rendered thin by distension, are made stronger by the adhesions which takes place upon them - as the tumor expands it encroaches upon and absorbs every opposing obstacle

the hardness of bone itself being no safeguard against its onward progress to the surface of the body. On reaching the integument, the surrounding parts are but very much as the ordinary inflammation and suppuration ensuing. If there be separation of the edges of the sloughs; death is a necessary consequence: either from a sudden gush which soon ends the scene, or the patient may sink gradually from the slow continued drain of the river of life. The tumor may burst either in a mucous tract or a serous cavity. In either event it will prove fatal.

Respiration may be suspended by the pressure from an aneurism tumor seated in the neck, the trachea being entirely closed. The continued pressure of the tumor on viscera or nerves of the abdomen may also be a cause of death without its drip tum.

Cause - The predisposing cause is anything which vitiates or poisons the circulatory system. As in Syphilis where the whole system is involved. The exciting causes are - violent straining of the body, or local injury, deep grief and painful emotions of any kind

Situation.- The most favorite and dangerous seat of aneurism is the aorta. The next in order of frequency being the popliteal, the femoral, the external iliac, the subclavian, the axillary, the external iliac and innominate arteries. Those of the extremities are seldom diseased, owing to their smallness of calibre and great power of contractility. The legs are more subject than the arms.

Dissecting Aneurism.

Having treated of the common forms of aneurism. I will now take notice of dissecting aneurism, which though [illegible] infrequent

occurrence it is well to mention. This variety of the disease is caused by ulceration of the diseased lining membrane of an artery. The blood making its between the tunics, they are split for some distance both above and below the diseased spot. Death may result from the embarrassment to the circulation; the brain often becoming softened by being deprived of its wonted supply of blood.

Spontaneous Cure.—

Every aneurism is not necessarily fatal, but occasionally a spontaneous cure is affected.

Spontaneous cure - This formidable disease is sometimes though infrequently supplanted by natural efforts alone. This is affected by the formation of a laminated coagulum in sufficient quantity to weaken the force of the column of blood, and in this way check the expansion of the artery. The blood thong arrested in its course does not cease entirely to flow through the tumor. The clot thus formed is a firm fibrinous deposit and is called an active clot. The passive clot is one that is formed suddenly, completely cutting off the circulation through the artery. It never

effects a cure as it is either rapidly absorbed or is discharged externally after undergoing suppuration. Sometimes though rarely the disease may be cured by the aneurism blocking up the artery entirely. The Aneurism has been known to cure itself, indirectly by pressure from the tumor upon the artery.

Treatment.

In the treatment of Aneurism we must endeavor to imitate nature's efforts to get rid of her trouble. In the first matter of treatment that of compression first demands our attention.

It is the simplest and at the same time the safest means of cure, where practicable to apply it. The compress should be applied mediately that is between the tumor and heart on the sound portion of the artery, in this way the formation of the active clot will be favored by the slow passage of the blood. Too much pressure must not be used as it would stop suddenly the circulation. This method of treatment has the advantage of being discontinued at any moment it should be eppededient; and also its fa[illegible] from danger of secondary hemorrhage, a frequent accident of ligature

compression is contraindicated where inflammation of the integument exists, the limb is much swollen, or where we have diffused aneurism to deal with. If the tumor increases rapidly threatening rupture or gangrene of the limb the ligature must be immediately applied. The patient should undergo a preparatory course previous to treatment for the Aneurism, by administering purgatives and diuretics. He should then be kept on moderate diet and in the recumbent posture. Too long pressure on one spot may avoided by shifting the bandage.

continued flexion of the elbow or knee joints have affected the cure of an aneurism.

Ligatures. When other means have failed to cure the disease or are inapplicable, it becomes necessary to ligate the artery between the heart and tumor. The ligature must be applied some distance from the aneurism beyond the diseased part of the artery, unless this vessel be in a healthy condition. The wounding of the adjacent veins, or inclosure of veins or nerves must be avoided as it would occasion serious trouble. The ligature may be applied on the distal side, where

it cannot be placed between the
heart and tumor.

Medical Treatment.

When an operation is impossible, the circulation should be kept tranquil. Opium may be given to quiet the nerves. If the patient is plethoric, a small quantity of blood may be taken from him. A nourishing but unstimulating diet is necessary. Arterial and nervous sedatives are given. Iodide of Potassium is thought by many to possess the power of coagulating the blood in the aneurism, and is therefore given for this purpose.

AN

Inaugural Dissertation

ON

Rheumatism

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

John J. Skinner

Of

Virginia

Session of 66-67 1867

Rheumatism -

I have chosen for my subject that very common and painful and yet not often fatal disease rheumatism -
It may be divided into three different forms - viz Acute, Subacute, and Chronic -
In the first we have great pain and fever: it is a disease which most generally attacks the joints and especially the fibrous tissue and wherever it is found in the body, it is also sometimes found in the other tissues - In the a-

cute form often the disease is not announced by inflammation but with great pain and fever, generally have the inflammation first and the fever in connection with it - It most generally shows itself in the extremities and usually in the lower first - It may be confined to a single joint or to the whole or part of one limb frequently it attacks more than one limb and other portions of the trunk successively and often the exterior of the body - And when the exterior of the body is thus affected we most generally find that one side is more serious than the

other – It is partial to the large joints, ankle, knee, wrist, and elbow, very seldom met with in the fingers or toes – It is announced by inability to move the parts and upon an effort to move the part, pain and stiffness, in other instances from the first the pain is both acute and violent –
Soon their is great pain and swelling, but the pain is relieved somewhat by the swelling, To move the joint you would think that it would be death to your patient on account of the pain –
The swelling is usually hard and elastic, and the skin red –

dened with a light-rose color and by degrees assuming that of the natural skin frequently it is not changed in color -

The inflammation changes from one place to another as from the knee to the ankle or to the same joints upon the opposite side - To the wrist or elbow or changing from one place to another moving first to one joint and then to the other sometimes the first joint is attacked - the second or third time, the swelling does not disappear with the pain but abates somewhat and becomes softer and less tense and elastic - It in some

than in the shoulder and hip which are more protected with muscles - In severe cases the pains are not entirely absent and are often so severe as hardly to be borne, the least movement or pressure increases the agony of the sufferer - Soon after the attack the commencement of fever is experienced by rigors, increase of the pulse, heat, furred tongue, disgust of food, thirst, and sometimes headache - The fever is of the low form, full pulse, strong but usually not very frequent from ninety to a hundred and ten and very seldom exceeding a hundred - The skin though hot

is less so than in other diseases, and often accompanied with great sweats which have a peculiar sour smell, which have no effect upon the inflammation or pain. The respiration is not disturbed when the disease is confined to the joints. The bowels are usually constipated and very hard to move. There is very little change in the secretions, the urine is scanty, high colored. The brain is not often affected, and the patient being seldom delerious, though suffering for the want of sleep by pain. The fever is greater at night with an increase of the

pains and a diminution of them in the morning - The disease sometimes extends to the lining and investing membranes of the heart constituting endocarditis and pericarditis: endocarditis is much more common than pericarditis, the latter is more dangerous, whilst in the former if not cured we may have disease of the valves of the heart and ultimately death - The affection of the heart is most generally announced though sometimes its presence is not so: pain and oppression in the precordial region difficult breathing with or without cough, increase of the pulse, and disturbed or peculiar expression of the countenance - and it requires a close ex-

amination by means of auscultation and percussion into the condition of that organ and its membranes - The inflammation of the investing and lining membranes does not denote a terming of the external inflammation, they are only an increase and not a transfer of the disease - It is thought that rheumatism in the ligaments is more liable to extend to the heart than when it is in the synovial membranes - The pleura is also the seat of inflammation in connection with external rheumatism, very often in complication with the disease of the heart - The extension of the dis-

case to the brain is more or less dependent upon that of the heart —
It shows itself occasionally in the liver termed bilious, giving rise to bilious vomiting from an excess of secretion, or yellowness of the skin, conjunctiva, and tongue, and in others from the diseased condition of the liver, but oftener accompanied by an attack of remittent or intermittent fever —

The disease is if taken in time can be checked in the course of eight or ten days or it may go on for weeks or even several months, twelve days or three three to four weeks is the usual length of the disease by the proper

use of remedies -
The pain is lessened, and the parts become softer so that, instead of being hard and elastic as at first, it will frequently retain the impression of the finger, and the swelling will soon begin to dis-appear -
When the disease is about to give away the inflammation subsides, the pain grows less, and the patient is not so easily disturbed by being moved or for any one to approach him as he was at first, he generally has more or less tenderness and swelling for sometime after the inflammatory symptoms have passed -
The joints and muscles are often

left- stiff and weak after the patient has been relieved of the acute stage of the disease- Anatomical Characters fibrin found in the blood, buffy coat when allowed to coagulate, Pneumonia is the only disease in which we find increase of fibrin and the buffy coat, but this is only found in the acute pain and fever- Uric acid is not increased- The autopsy have disclosed in the synovial membranes redness and thickening of them and the synovial fluid increased, pus is occasionally met with in the joints- The fibro cartilages are absorbed and softened by the inflamma-

tion, the inflamed muscle have presented a dark hue, with softening and an excess of blood in their cellular tissues - The inflammation has also been met with in the sheath of the arteries - Cold in connection with moisture is the principle cause of the disease it very apt follows from being imprudent; as being engaged in great bodily exertion or from heat and while the perspiration is still at its height - To lie upon the ground or be inactive after the exertion and sitting in a cold damp room, and sleping in a bed with the bed clothes

damp - And not changing the clothes after being exposed to rain - And therefore persons who have had previous attacks of acute rheumatism, should be guarded against exposing themselves too much during the change of weather - Men are oftener attacked than women from being more exposed; It makes its appearance between puberty and thirty-five or forty, though it sometimes makes its appearance sooner, and the child very often has the heart involved, if the old are attacked they most generally have had the disease when young. A predisposition to it is often in-

herited. It was for a long time confounded with gout, by the common name of arthritis, and was first given the distinct name of rheumatism in sixteen hundred and forty-two by Ballonius. And, although rheumatism may even now be confounded with gout, the difference between the two diseases is found from observation to be very manifest. The two complaints are often found together, the difference between the two is very great as gout is found in those who live high, and indulge in the use of wine and take little or no exercise; while rheumatism attacks the laboring classes

and those that are exposed to the vicissitudes of the weather — Children are subject to rheumatism, in gout they are not, gout is more hereditary than rheumatism. In gout we find more uric acid in the blood, in rheumatism we have no increase of the acid, in gout the small joints are attacked, in rheumatism the larger, the pains are greater and the inflammation a deeper red in gout than in rheumatism. In gout we have the formation of chalk stones, which we have not in rheumatism — Acute rheumatism, in adults if taken in time and not any of the internal organs or

the brain involved with it hardly ever proves fatal, and then the disease may be overcome by proper remedies — But in youth the heart is left more or less involved and life is finally lost by hypertrophy and dilitation —

Sub-acute rheumatism is a milder form of the disease, as in the acute it may attack the joints and muscles, the muscles are usual the parts that are attacked, while in the acute the joints are generally involved.

It may attack more than one joint but as the disease would thus be increased we would have the first form of the disease — The pain is slight the

redness and heat not so great and the swelling is less tense and elastic-
When it attacks the muscles it may only involve one or several, it may frequently extend to several in the same neighborhood and involved in the same office - At first there is only a slight soreness, which continues to grow worse until we have a dull aching pain, which increases when the muscles are brought into action. Often it is not announced by previous soreness but comes very sudden when the muscles are brought into action as when attempting to get up from a chair or moving in the bed. The pain is sometimes almost insupportable and the patient refuses to perform the movements

of the muscles after he once finds out what will increase his suffering -

When he is at rest or the part that is affected, he suffers more or less from a slight pain, with heat, and the pain increased upon pressure. The swelling is very slight and often entirely absent; the pulse very little increased, and the natural heat of the body increased, but it very seldom amounts to fever - It is not particular which of the external muscles it attacks; the internal are often the first that are affected, it may not confine itself to the joints and muscles, but attacks the other tissues as the nervous tissue causing pain when it is pressed upon and more or less pain along the

course of the nerve and it may be affected and the parts it is distributed.

This form of rheumatism is peculiar liable to metastasis, more so than the acute or chronic. It is met with in the muscles of the scalp, eyes, face, neck, chest, abdomen, hip, heart, diaphragm and also in the alimentary canal, the liver and kidneys. When in the scalp, denoted by headache, soreness upon pressure and the movements of the muscle of the head increase the pain, and when we have headache without the inflammation in other portions of the body pressure generally gives more or less relief. The muscles of the face are occasionally affected, and it may be

confounded with tetanus or locked-jaw. The disease may be seated in the muscles of the neck, causing stiffness—

The intercostal muscles are sometimes affected and may cause great uneasiness when a full breath is taken or the pain can be increased by pressure—It may be mistaken for pleurisy, but as other parts are generally affected with rheumatism and it can be made out by attending to the signs of auscultation and percussion or we can be very much aided if the patient attempts to cough or cause motion on the intercostal muscles, he will if rheumatism be present have severe pain in the muscles—The hip is very often the seat of the disease, the muscles or the ligaments of the pelvis are often the seat of the inflammation, and the sheath of the sciatic

nerve is sometimes affected shown by tenderness of the nerve, and extends to the thigh and leg – It may be confounded with other inflammation, but the previous attack or at present having rheumatism, and the pain becoming greater if the heat of the body is raised, the pain remaining the same in a uniform temperature of the body, will aid in seperating it from common inflammation – This form of rheumatism is found in the internal parts of the body – And is very apt to prove fatal or leave the organ in a state of chronic disease which will sooner or latter prove fatal, or the muscles of the organ become diseased, causing sudden death, palpitation, hypertrophy, and dilitation of the heart – The causes are the same as

in the acute form, exposure of the body to cold, sudden chilling of the body during perspiration, putting on damp clothes, or not changing them after being out in the rain or snow, sleeping in a damp room or the bed clothes not properly dried -

This form of rheumatism may be distinguished by the suddenness and severity of the attack in comparison with the other parts of the general health, and the great distress which the movements of the muscles which are diseased give to the sufferer, the metastasis of the disease differing from common inflammation by the absence of the formation of pus - The subacute form seldom proves fatal without there is a complication of the disease with the heart and especially the muscular structure of that organ so as to arrest its movements; or upon the brain

or the stomach -

The chronic form, by this is usually meant that state of the disease in which there are pains, without inflammation of fever - It may exist in the fibrous, or muscular tissue; it may be exhibited with the acute, considerably mitigated or subdued, among which are a small hard corded and accelerated pulse, pain peculiarity liable to shift its position, increased by warmth and more so at night in bed when covered by a large amount of bed clothes -

The patients are very apt to be more or less able to give notice of a change in the weather, the pains are more or less increased, and the parts become stiff and weak, this feeling is greatly increased by having a previous

injury to a joint or a bone, as a strain, dislocation, or fracture, and by the abuse of mercury – Even while there is not a cloud to be seen and the sun is still shining we often hear some old sufferer of this disease complaining of his aches, and foretelling of rain or a storm – When the muscles are diseased, from the slightest affection to a total loss of power in one or more of them, occasionally it is characterized by an atrophy of the muscles, in which the interstitial and investing cellular membrane, and as it would appear the muscular substance itself are so far wasted away as to leave only the tendons and fasciae – The affected limb is cold and sometimes so torpid and relaxed as to amount nearly to paralysis – It can often be

relieved for a time but very often again make its appearance, often medecine appears not to have any control over the disease and so the patients life is made anything but pleasant to him and eventually he passes from this stage of action to that journey borne from whence no traveler returns -

The formation of pus in the joints, the synovial membrane suppurates, wasting of the cartilages, suppuration in the soft parts with external abscesses, and the patient is at last worn out by hectic fever - It is a disease which is very irregular, continuing for months and even years or the patient may be troubled during his lifetime - He may be relieved from his suffering during mild weather, but as soon as there is a change in the

state of the weather his sufferings are again renewed - The aged appear to be more subject to chronic rheumatism than the acute form - As an inheritance predisposition to it would seem sometimes to be received - Also changes of the weather and it is chiefly found in damp and variable climates, and more particularly in the spring and fall, owing to the greater and more sudden changes of the weather - But at all times by an exposure to cold, and especially with moisture or sleeping in a damp room, or damp bed clothes, wearing damp clothes, poorly protected from the vicissitudes of the weather, sitting in a draft of air, entering ice houses and cellars in summer -

This disease may be mistaken for common and scrofulous inflammation, and sometimes paralysis of certain muscles - From the first it may be known by having a previous attack of rheumatism, and its frequent metastasis, and the increase of the disorder by change of the weather -

Treatment of the acute form - In a vigorous and robust individual, with a strong pulse bleeding is advisable, one or two bleedings are sufficient - i.e. when the pulse begins to become more frequent, and resistance the lancet should be no longer used and at any time it should be employed with caution -

For constipation of the bowels, a full dose of sulphate of magnesia alone or in connection with calomel, to allay pain and procure rest opium and Ipecacuanha and as the system becomes accustomed to its use it should be increased or it may be given in the form of Dovers powder - These remedies proving useless after ten or twelve days, the calomel should be given at the same time with the opium and ipecacuanha two grains at a dose the calomel should not be carried to its full effect upon the system - At this point we have another great agent to assist us, Colchicum alone, or in combi-

nation with the calomel or the colchicum may be given along with one of the salts of morphia instead of the Dovers powder ever four or six hours-

Sometimes the disease is accompanied with perspiration - during sleep, with nervous disturbance, when we have one or both of the disturbances Sulphate of quinia alone or in combination with opium - Affection of the heart - cupping between the shoulders, blister over the region of the heart; Calomel is to be given so as to act upon the system, and blisters to the external seat of the disease - Camphor liniment assists in the relief of the inflammation upon the pericardium -

Phosphate of ammonia has been strongly recom-

mended by the late Dr Buckler of this city; that it tends to eliminate uric acid from the system by forming a soluble urate of ammonia; the phosphoric acid being neutralized by the soda with which the uric acid may be combined in the blood, dose ten to twenty grains three to six times a day -

The body should be well clothed in flannel from the neck down -

Of the subacute form, depletion is not advisable without the patient is robust with a strong pulse bleeding will very much aid in the cure. Relieving the bowels, with sulphate of magnesia and every few days with magnesia and wine of colchicum root, if this acts too much upon the bowels they can be kept open by a more gentle laxative - Opium and ipecacuan-

ha or instead of this, the Dovers powder will add greatly to hasten the cure: Colchicum alone or in combination with a solution of the sulphate of morphia so as to put the patient under a moderate narcotic impression, the acetate extract of colchicum with gum and ipecacuanha - The various stimulants are given as aconite, stramonium belladonna, alone or combined in very obstinate cases - This form has to be dealt with, with great care as it is very liable to metastasis if blisters are used many though direct a free use of blisters and different stimulating liniments - The warm or hot-bath in this form of the disease is often very beneficial in connection with the Dovers powder or colchicum -

When the internal organs are attacked in this form blisters, and depletion, Calomel in combination with opium and ipecacuanha are to be employed also, often after the blood letting, Colchicum has been found of great service-

In the Chronic form bleeding is not advisable, cleaning out the prima via is of great importance, sulphur, or a mixture of sulphur with magnesia or bi tartrate of potassia, and in connection with the purging to allay pain Dovers powder at night. Colchicum is of great benefit also in this form-

Iodide of potassium when we have forma of nodes in the periosteum. nitrate of potassa has been used with success, guaiac.

turpentine is greatly esteemed by some-
Cod liver oil is recommended by the
German physicians - Daily bathing
has been recommended hot or cold, after
the latter friction should be employed-
Vapor baths are held in high repute
such as sulphur, Camphor, Turpentine-
The use of stimulating liniment is
often of great benefit - Every means
occasionally proves unavailing -
And often great benefit is derived from
traveling and especially a visit to the sulphur
springs of Virginia have given great
relief - As this disease is apt to return,
and to prevent the recurrence it is of
great importance; cold is one of the
principle causes and as a protection the

patient should be advised to wear flan-
nel during the winter and silk or
light flannel in the summer —

AN

Inaugural Dissertation

ON

Reproduction

SUBMITTED TO THE EXAMINATION

of the

Provost, Regents and Faculty

of

PHYSIC,

of the

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

Doctor of Medicine,

by

M. M. Walker

of

Westmoreland County, Virginia

Session *Fifty Ninth* 1847

"The process of Reproduction is the most characteristic, and in many respects, the most interesting of all the phenomena presented by organized bodies."

Had we no other argument to meet the assaults of the Infidel, surely the process by which living organisms, animal & vegetable, are generated and developed, to fill the places of those of their species, that have become debilitated by the rapid march of time, or whose terms of life have expired, would be sufficient of itself, to prove to the reflective Mind, the

existance of a Supreme being,
who rules the world and ordains
all things in wisdom.

Having before us a subject
upon which volumes might be
written, we shall not attempt
to explain the process in the
various species of the Animal
and Vegetable Kingdoms, but
confine ourselves exclusively
to the consideration of the
subject, with regard to the
human being. Speaking
of Animated Nature, suffice
it to say "Omne vivum ex ovo"

We will now enumerate
and briefly describe the

Generative organs of the female. They consist of - Uterus, Ovaries, Fallopian tubes, and lastly of the Vagina, which is the passage for the reception of the male generative organ in the act of Copulation.

The Ovaries are two oval compressed bodies, situated in the cavity of the pelvis, one on each side - each ovary is attached to the Uterus by a narrow fibrous cord, and to the Fallopian tube by one of its fimbriae, into which the extremity of this tube expands, it is

enveloped by a capsule of
dense fibro cellular tissue,
and the whole surrounded
by Peritoneum.- The internal
structure is composed of soft
fibrous tissue or stroma,
supplyed with blood vessels, and
there is imbedded in it numerous
follicles or vesicles, The Graffian
vesicles containing the ova.

The Fallopian Tubes are
about four inches long, and
extend between the ovaries and
uterus, expanded and fimbriated
at the ovarian extremity,-
externally it is invested by
a serous coat, internally

it is lined with mucous membrane, and fibrous tissue occupy the space between the two coats.-

The Uterus is a pyriform fibrous organ, its cavity lined with mucous membrane, - unimpregnated it is about three inches in length, and two in width at the upper part, at the neck only half an inch. It consists of fundus - body, and neck, its walls are made up of plain fibro-cellular tissue.- The Fallopian tubes open into it, and at the neck it communicates

with the Vagina.

The Vagina is a thick membranous canal, extending from neck of Uterus to the external organs of Generation, lined with mucous membrane.

The Ovaria each contain, on an average, from fifteen to twenty small vesicles of various sizes, during that period of life in which power of conception exists, these are designated Graffian vesicles.

At their first formation these sacs are small, and deeply placed in the substance of the ovary, but as they

grow, they make their way to the surface, and when mature they form little prominences on the exterior of the ovary, covered only by peritoneum, each vesicle is connected with the stroma by a net work of blood vessels, and this is lined with a layer of nucleated cells, Membrana Granulosa. The cavity of the follicle is filled with an albuminous fluid, in which Granules float, and it contains also the ovum.

The ovum is a minute spherical body, in mature

vesicles it is situated in
contact with the Membrana
Granulosa, and at that
part which forms a prominence
on the surface of the Ovary.—
The ovum is surrounded by
numerous Granular cells forming
a kind of Zona, it is also con-
tained within a fluid, and
by gentle pressure we find its
external investment is a
transparent membrane,
called the Vitelline Membrane—
within this Membrane lies
in close contact the Yolk
or Vitellus, which is composed
of Granules or globules of

various sizes, and imbedded in a fluid substance, and in this substance of the yolk is imbedded the germinal vesicle, which consists of a fine transparent structureless membrane containing a fluid, with sometimes a few granules, and in this, nearest the periphery of the yolk, is situated the germinal spot, - a fine granular substance of yellow color, strongly refracting the rays of light, and measuring in Mammalia from 1-3600th to 1-2400th of an inch, -

The Graffian vesicle is formed previous to the ovum, which is subsequently developed in it.

The development of these vesicles and the ova, continues uninterruptedly from birth to the end of the fruitful period of womans life. Bischoff describes the process of formation to be as follows.- At first nothing can be seen in the ovary but cells and nuclei of cells, and groups of cells are seen in the stroma.-

The peripheral cells of each of these groups subsequently coalesce so as to form a homogeneous, transparent, vesicular, membrane,

while the portion of the mass within becomes fluid— Thus the Graffian vesicle is formed on the inner wall of this vesicle, Now cells are formed, and the cavity contains a transparent fluid, with nuclei and granules suspended in it—
The next stage is marked by the appearance of a second smaller transparent vesicle within the Graffian vesicle, This second vesicle, which is the Germinal vesicle, has a nucleus, the Germinal spot.
Granules soon accumulate around this vesicle— With

regard to the part of the ovum first formed, it appears certain that the formation of the germinal vesicle, precedes that of the yolk and zona pellucida or vitelline membrane, whether the germinal spot is formed first, and the germinal vesicle afterwards developed around it, can not be decided in case of vertebrate animals.

The ovum at first occupies the centre of the Graffian vesicle, but is subsequently removed to its periphery — The germinal vesicle is found also at the periphery in mature ova.

the no of Granules of a mature ovum's yolk, are greater and more opaque. In the process of development of individual vessicles, each increases in size and gradually approaches the surface of the ovary, and when fully ripe, forms a little projection on the exterior - Coincident with its increase by augmentation of its liquid contents, the external vessicle becomes thin, and eventually bursts - By this means, the ovum, and fluid contents of the Graffian vessicle are liberated, and escape on exterior of ovary, whence they pass into the Fallopian tubes, by

the fimbriated extremity, grasping
the ovum, — In most Mammalia
this bursting of the vesicle, takes
place when they arrive at Maturity,
and are discharged at such
periods only — In oviparous
Animals the separation of the
Ova from the Ovary, may take
place without impregnation
by the Male, or any sexual union,
This discharge also occurs in
Mammalia without Coition.

The period at which Matured
Ova are received into the Fallopian
tubes, is in Mammalia called Heat
or rut, And in the human
female, by the phenomena of

Menstruation — Sexual desire manifests itself in the female with great intensity at these periods, and in animals at no other times. If union take place, the ovum may be fecundated. The occurrence of a menstrual discharge is one of the most prominent indications of the commencement of puberty in the female sex. This function continues until forty five or fifty years of age. The discharges are periodical, and occur at the interval of a lunar month, last from three to six days.

It does not usually occur

in pregnant women or in sucking
ones, but instances of such are
not rare. This discharge is
of blood effused from the inner
surface of the Uterus, and mixed
with mucous from the Vagina, thus
rendered less coagulable than ordi-
nary blood. The relation of
Menstruation to Ovulation is simply
this - when a Graffian vesicle bursts,
it is assisted in its fecundation, and
supported as to its Ovum, by the cessation
of this monthly sickness, which then
gives its blood up to the nourishment
of the Ovum. Before and after
the rupture of a graffian vesicle, and
the escape of the Ovum, certain changes

ensue in the interior of the Vesicle,
which result in the production of
a yellowish mass, The Corpus Luteum—
This is a roundish Solid Orange
Colored body, composed of lobules
Surrounding a small Cavity or Mass
of white Substance— it was for a
long time considered an evidence
of previous impregnation, but such
is not the case— The Corpora lutea
of Virgins, differ from those of
impregnation, in size and character—
Those of impregnation, continue
to grow, and go on so nearly the whole
duration of Gestation— those of
Virgins, proceed no further than the
formation of their Cayse, which

shortly disappears. The seminal fluid is a white viscid substance, secreted by the testicles, whence it is carried by the vasa deferentia, to vesicular seminales, to be thrown into the vagina during coition, through the ejaculatory tubes. It is the fecundating fluid and must come into actual contact with the germ of the female. It contains principally spermatozoa and seminal granules. A double function is given to vesicular seminales, i.e. they both secrete some fluid to be added to that of the testicles, and serve as reservoirs for the seminal fluid. The latter is probably their chief function for in the horse, boar, guinea pig, and

many other Animals, they do not communicate with the vasa deferentia.

In Man when one testicle is lost, the corresponding vesiculae seminalis, suffers no atrophy, though its function as a reservoir is abrogated; but how they act as secreting organs is unknown— It is nearly certain, that their secretion contributes to the composition of the impregnating fluid.

By the fertilization of the Ovum we understand that process by which the Generative Material of the female unites with that of the Male, forming a living being— It occurs generally at one of the Menstrual periods.

The Ovum of Generation, are— 1st

Theory of Ovulation, and 2d Theory of Epigenesis — first, that the female forms the Germ, and the seminal fluid gives life to the Germ — Second, that the Germ is the Mixture of the Germs of both, And here, though having barely introduced a subject, which is of so much interest, both Theoretically & practically, having written the usual Number of Pages, I will bring this dissertation to a close with a quotation from Dalton,

"The very Commencement of existance by leading through its successive intermediate Stages Conducts at last necessarily to its own termination".

A Dissertation
on
Phthisis Pulmonalis
Submitted for examination,
by the
Medical Faculty,
of the
University of Maryland,
For the degree of
Doctor of Medicine,
by
G. Glanville Rusk.
of Balt. Md.
1867.

Gentlemen:-

Without consuming time to take a survey of this disease, known in and out of the profession, as one of those maladies in which medical science has failed to produce a single cure, except in those cases where the laws of Nature were instituted from the very commencement of the disease. Although free to admit there have been cases of Phthisis Pulmonalis, which appear to get well as the expression is, under the use of remedies, but I think after consulting the best talent upon this subject and drawn some little observation, I would

refer these isolated cases, which occur most frequently in the practice of the quack, than to legitimate practitioners, to the curative powers of nature, than to any medication which he may have undergone. And here I would state although medical science fails to rescue the consumptive from a premature grave, yet she can make that path which is so rugged and almost unbearable comparatively smooth by her administrations; even this should give the medical man courage to assume the great responsibility of treating the consumptive which he knows to well, in the

great majority of instances will be inevitably fatal.

Morbid Anatomy.

Tubercles are not organized, or should they have an organization, as is stated by some authorities, it is a very imperfect one. Tubercles increase by addition to their surfaces, as in the inorganic kingdom. Hence the above statement in regard to the non organization of tubercle is no more than likely, owing to the analogy existing between the tubercle and inorganic kingdom. Tubercles may form in masses which is caused by the agglutination of several tubercles.

Tubercles are round, but not necessarily, as some have thought, but depend

upon the physical character of the tissue they invest.

Division of Tubercles.

There are two varieties: the grey and yellow. The former will be met with ~~in~~ by far in the greater proportion of cases. They are hard and will not yield to a moderate degree of pressure, they are small, generally speaking; about the size of a grain of mustard. Laennec, the most learned pathologist of his day, called them miliary granulations, and were believed by him, to be the primary form of tubercle; although the investigations of the present pathologists do not accord with his views, Hence the truth of

the assertion, "what is said to be true to day may prove false to morrow".

Yellow tubercles in opposition to gray are decidedly opaque and of a dull straw colour, its consistence has been compared to cheese and the sensation it produces is only applicable to this variety.

Structure and Elementary composition of Tubercle.

The views of every pathologist appear to be at variance upon this part of the subject. Dr. Wright tells us they are granules and vesicles, the former are elementary, the latter the perfection of the primitive. Dr. J. Hughes Bennett one of the great lights of the profession at the present day, who has caused a complete

revolution in the Practice of Medicine,
would lead, we believe, that it
consist of an exudation of the liquor
sanguinis, presenting a great difference
from simple or inflammatory
exudation, on the one hand, and
the cancerous exudation on the
other. Dr Bennetts views are very plausible,
although the true explanation may
remain unsolved for ages

Position of tubercle

The mucous membrane is generally
the seat of tubercular matter or is
far more extensively affected than any
other membrane

Changes of tubercle

1st Authors present three stages

which I shall notice briefly:- Formation, Softening, ulceration.

The formation of tubercle may be caused by imperfect nutrition, and I doubt not that the larger proportion of cases is caused in this way. And this is a point of great practical importance, to the medical attendant who can enforce such rules of Hygiene as may prolong life, on the one hand or eradicate the disease on the other. Softening generally takes place from the centre and proceeds to the circumference, but there is no uniformity in this respect. Ulceration is the third stage, properly speaking. This is the ulcerative stage of phthisis and not of tubercle as has been supposed.

bonicae

The hypogenic membrane lines the tuberculous cavities, and has been established by nature with a view to cure. The other lobes are first made to suffer from the tuberculous cavities.

Diagnosis

This is easily made out when the tubercles are large and in great numbers, but very difficult when they are small and far apart, and baffles the skill of the most experienced in the art. It is of great practical importance to be able to distinguish the stage of the disease, as the treatment is different in each. The signs which constitute the diagnosis to those

previously stated are easy in the second stage less so in the first. Cough commences without any appreciable cause, the patient may still enjoy excellent health.

Expectoration

Whether it occur at first or at a more advanced period of the disease gives a sputa, of which there are three varieties - clear, frothy and white. Pain is felt in shoulder and in the side resembling the "pleuritic stitch" whereas in pulmonary catarrh pain is felt behind the sternum. Haemoptysis is also very valuable sign in forming diagnosis. During the first stage percussion will yield

dull sound ~~percussion~~ and
bronchial respiration will be heard.
In the second stage dyspnoea becomes
evident from the compression which
is caused by the increase of the bronchi
both in its size and number.
In the third stage auscultation
will elicit a gurgling sound, amphoric
resonance, and pectoriloquy.
Symptoms.
Cough, expectoration, haemoptysis,
debility, loss of flesh, dyspepsia, night
sweats, diarrhoea, paroxysms, asthenia
quick and frequent pulse, fistula
in ano in the male.
Cancer.
It may be inherited or acquired; it

is not, contagious. Insufficient food impure air, deficiency of light, and immoderate indulgence of the sensual passions, are among the most frequent causes.
Its duration varies from six to twenty four months. It may and does prove fatal in less than three months when connected with pneumonia or pleurisy.
Prognosis.
This of course will vary according to circumstance. The question suggest itself, Is there a cure for Phthisis? Each side has its advocates Prof Chapman remarked on one occasion, "Never have I had the good

fortune to witness a single case or to know of a well authenticated one". Drs Stokes and Corrigan declare it to be curable.

Treatment.

"Quomodo curatur Phthisis? Nescio"

The treatment may be divided into prophylactic, palliative & curative. Happy would it be for mankind and for the practitioners of medicine could they extend to suffering humanity some remedy which would stay this fearful disease. Matrimony especially when followed by pregnancy has changed the disease very successfully in many instances. Mania probably upon the same principle has cured Phthisis.

Specific treatment is of very little service except when commenced in infancy, especially when the mother is more or less predisposed to it. Nutritious food should be freely given, and it must be easy of digestion; but excessive repletion must be avoided. Daily exercise should be freely ~~freely~~ enjoyed by the little patient. The intellectual capacity must not be overtasked in such children, and should always be met with reproof by the physician.

Palliative Treatment

We should try to prevent pneumonia bronchitis, pleurisy, or haemoptysis,

and disordered digestion, or should they occur our remedies should be used judiciously to correct the presenting feature.
If the patient be plethoric leeches cups, turpentine stupes will be of great service in removing congestion or pressure from diseased parts. Change of scene, horseback riding, and various kinds of exercise in good weather should be advised, from the first. As regards medication it should be avoided as much as possible, trusting to nature's efforts. I do not mean to disregard medicine entirely; but it should only be given to meet urgent

~~urgent~~ symptoms.
Cod-liver oil and iron are the principal medicinal means for nutrition and opium to allay cough various specifics have been proposed, but they have all proved more or less worthless. In haemoptysis turpentine from five to ten drops is highly beneficial. Liquor Potassae is very useful when combined with bark. When the cough is very severe opium or any of its preparations will give relief. Should the heart become irritable it may be controlled with Prussic acid and Digitalis, Gallic acid or Oxide of Zinc for night sweats

Gentlemen,

I have now given the general outline of Phthisis, its morbid anatomy, symptoms, physical signs, diagnosis, and prognosis, and treatment, which I sincerely hope will agree with your views upon this subject.

Respectfully Submitted
G. Glanville, Husk.
Balt. Md.
1867

AN

Inaugural Dissertation

ON

Opium.

SUBMITTED TO THE EXAMINATION

of the

Provost, Regents and Faculty

of

PHYSIC,

of the

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

Doctor of Medicine,

by

Joseph S. Raborg

of

Baltimore Maryland.

Session 1866 67.

Opium.

Is the concrete juice from the unripe capsules of *Papaver somniferum*. It is considered as originally a native of Asia and Egypt, but is now extensively cultivated, and grows wild in most parts of the world. It is an annual plant, stem-erect, branched sea green colour, 2 to 6 feet high, leaves amplexicaul, flowers large, Preparation. Opium is obtained from the capsules of the poppy by a nearly similar process in all parts of the world in which it is prepared: A few days after the petals fall off, incisions are made hori-

zontally and obliquely with some sharp instrument, taking care not to penetrate the cavity. A white milky juice exudes in drops, which is allowed to remain on the poppy head for 24 hours. It is then scraped off, and deposited in earthen or wooden vessels, in which it is assidiously stirred until the different collections made are thoroughly inspissated, water being sometimes added to keep up the moisture. The Opium is finally dried without heat, first in small cakes, afterwards in large masses, and in most places wrapped in poppy leaves, to prevent them from adhering.

The Opium met with most commonly is called Turkey opium, and is principally brought from Smyrna, a small quantity occasionally coming direct from Constantinople. Smyrna Opium occurs in irregularly rounded lumps, varying in weight from a few ounces to two or even three pounds, the most general size being from a pound and a half to two pounds. When first imported it is usually so soft as to be readily imprinted with the fingers, but it quickly becomes hard by keeping. It is of a brownish colour, and has a waxy lustre when cut; its odour

is strong and narcotic, and its taste bitter, acrid and nauseous. Opium is very extensively adulterated, and also varies exceedingly in quality, from the mode in which it is prepared. Many of the impurities which exist in Opium may be detected by a careful physical examination; such as moisture, sand, stone leaves, pieces of metal &c. But by the external characters, it is very difficult to judge accurately of the quality of opium, and the only sure criterion is to ascertain the quantity of morphia contained in a given specimen of the drug. In excessive doses opium is a pow-

erful narcotic poison, producing soon after it is taken giddiness and stupor, with scarcely any previous excitement; the stupor increases rapidly, accompanied with complete torpor, slowness of breathing, depressed circulation general relaxation of the muscles, contracted pupils, and unless active treatment be speedily employed, death quickly ensues. In medicinal doses, opium generally produces at first excitement of the vascular system, which is accompanied with exhilaration of the nervous functions, these effects are marked by an increase in the force and frequency of the pulse,

with increased heat of the body, and by the pleasurable sensations which are experienced throughout the whole system. Soon after unless the dose be repeated, the sedative influence of the drug becomes obvious: the general excitement is calmed, pain is diminished, a disinclination to muscular exertion produced, and the force of external impressions on the senses diminished; this state is succeeded by sleep more or less profound, which lasts usually from six to eight hours. On awaking from the sleep produced by opium, nausea, headache, loss of appetite, and

indisposition to any active exertion are very generally experienced. The effects of opium are modified by a variety of circumstances, but most remarkably of all by habit. This is well exemplified by a reference to the customs of some Eastern countries, as Turkey, Persia, and China, where the drug is commonly employed to produce a species of intoxication or excitement. In the two former countries the opium is eaten, in the latter it is smoked, but in either way the quantity used must be increased daily, or it ceases to produce the desired effect.

Instances of opium-eating constantly occur also in the British Islands; and a graphic account of the effects produced by this pernicious habit, as experienced by himself, is given by Mr de Quincy, in his Confessions of an English Opium-Eater. Among the Turks, the opium-eaters generally begin with doses of from one to two or three grains, and gradually increase the quantity till it amounts to two, three, or in many instances to six drachms. When opium-eaters are labouring under disease, they require very large doses of the drug. The special uses of opium in the treatment

of disease are very numerous. In fevers opium is principally used to procure sleep where there is great watchfulness or delirium present, without excitement of the vascular system, or where they continue after that excitement has been subdued by antiphlogistic treatment. Its use, however, must be attended with great caution, and should not be persisted in if the tongue and skin becomes dry, or if the pupil of the eye is contracted. In the Eruptive fevers, opium, when given with due attention to the concomitant symptoms, is productive of much benefit, and

in some cases is imperatively demanded for the safety of the patient; In intermittent fever, opium given in a large dose at the commencement of the cold stage frequently arrests the paroxysm; if there be any local inflammation or congestion present, its use is contra-indicated. In Inflammatory diseases, given in conjunction with calomel, it acts as a powerful antiphlogistic; one grain of opium with two or three of calomel administered every four or five hours, will be often found a remedy of much power in the inflammations of membranous

parts. In diffuse inflammation, particularly that fatal form of it which is accompanied with peritonitis, opium proves more successful than any other remedy which has been employed; it is best given alone, in doses of from a quarter of a grain to half a grain every hour or every second hour. Its beneficial influence in this affection depends upon its power of lessening irritability and thereby enabling the system to bear up against the disease. In peritonitis, caused by rupture of the stomach or intestinal canal, life can only be prolonged for

even a short period by the use of very large doses of opium. In rupture of the uterus, given immediately and freely opium has in some instances saved the life of the patient. In the early stages of acute dysentery, opium, ~~opium~~ given in full and frequently-repeated doses will be found, in general, to check the disease; the same may be also said of diarrhoea and common cholera. To allay the pain of gout and chronic rheumatism, it is given in full doses with much advantage. In delirium tremens, opium is the remedy on which most reliance is to be placed;

to prove beneficial, it should be employed in very large doses frequently repeated; thus, two or three grains of solid opium must be administered every third or fourth hour. It is more beneficial in hydrophobia and tetanus than any other agent which has yet been employed; in those diseases there is a remarkable insensibility to the action of the drug, so that it must be given in enormous doses to procure any good result. In all the varieties of neuralgia or other painful affections; in the nervous irritability which follows large losses of blood; in

senile gangrene; in cancer; in painful ulcerations; in poisoning with acrid or corrosive substances &c, opium is very generally employed as a palliative and anodine. It is also found a most useful adjunct to animal diet in the treatment of diabetes. And, lastly, in venereal diseases it is combined with mercurials to prevent them from running off by the bowels. Externally, opium is used in the form of infusion, liniment or plaster; Suppositories of opium are introduced into the rectum in painful or spasmodic affections of the neighbouring viscera

In powder, gr. ss. to gr. iij or gr. iv usually given in the form of pill, which may be made with simple mucilage, or, if they are to be kept for any time, conserve of roses.— Pilulæ Opii (Opium, 1 part; sulphate of potash 3 parts; conserve of roses 1 part; beat them into a proper mass, and divide into five-grain pills.) Each pill contains gr j. of opium. Dose, one to three pills. Morphia. A peculiar principle, on which the medicinal activity of opium chiefly depends. (Take of opium, sliced, a pound; distilled water, alcohol, each q. s.; solution of ammonia, 6 fluid ounces.

Macerate the opium with 4 pints of distilled water for 24 hours and having worked it with the hand, digest for 24 hours, and strain) Thus obtained, morphia is in the form of a white crystalline powder, the crystals being very minute; but, by solution in boiling alcohol and slow evaporation, they may be obtained much larger; They are inodorous, but have a sensibly bitter taste. Morphia, on account of its insolubility, is not used in medicine; The dose of the pure alkaloid would be from one fourth to one half of a grain in the

form of pill. Acetate of Morphia.
As usually met with, acetate of
morphia is a grayish-white pow-
der, sometimes obscurely crystal-
line, when pure, however, it is
snow white, and in distinct crys-
tals. It is inodorous but when
moistened emit a feeble odour
of acetic acid; its taste is intense-
ly bitter. It is composed of one eq.
of acetic acid and one of morphia.
Exposed to the air, it loses a por-
tion of its acid, and then is par-
tially insoluble in water; by heat
it is decomposed, and dissipa-
ted without any residuum. Acetate
of morphia is very soluable in water and alcohol.

When the base is not completely saturated with acid, its solution in water may be readily accomplished by adding a few drops of acetic acid. When the salt* is properly prepared, it is of a snow-white colour, and readily soluable in water. It is Incomp. with the strongest acids; the alKalies, and alKaline earths; and most earthy and mstalic salts. Muriate of Morphia. It usually met with in the form of a fine, soft, snow-white powder, but it may be readily obtained in feathery, acicular crystals. It is without odour, but has an intensely bitter peculiar taste.

The only impurities which are at present commonly met with in this salt are colouring matter and moisture, both of which arise from faulty preparation. It is snow-white; entirely soluble; solution colourless. Notwithstanding the observations of many, that morphia is free from the stimulating effects of opium, and that it acts purely as an anodine sedative, it would appear that it possesses essentially, though not quite identically, the actions of the drug itself. Thus, given in small doses, its first effect is to cause a feeling of ex-

citement of the circulation, and in some persons, also of the nervous system; this stage of excitement, however, is never so distinctly marked as when opium has been taken, and sedative effects are more immediately consequent on it. The dose of Muriate or acetate of Morphia is from gr 1/4 to gr ss; after they have been employed for any length of time, as large a dose as gr viij to gr x. will be required to act as a narcotic. In cases of poisoning with opium, we should immediately have recourse to the use of the stomach pump and stimulating emetics; to external stimulants such as cold affusion, loud talking,

compelled exertion, as forcing the patient to walk between two assistants, the application of ammonia or strong acetic acid to the nostrils, &c. to internal stimulants, the best of which are brandy, ammonia, strong coffee camphor and musk; and if all other remedies fail, artificial respiration and galvanic shocks should be had recourse to, the assiduous application of which has in some almost hopeless cases restored life; in one instance on record, artificial respiration was kept up for nearly three hours.

AN

Inaugural Dissertation

ON

Asiatic or Epidemic Cholera

SUBMITTED TO THE EXAMINATION

of the

Provost, Regents and Faculty

of

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of the

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

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by

William Thomas Emmett,

of

Anson County, North Carolina

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Asiatic, or Epidemic Cholera

This disease was first recognized and described in 1832, but it is thought by some that it always existed, having its nidus in certain parts of Asia, and from thence is conveyed by the pilgrims from Jerusalem. We have only had three visitations of the disease in this climate.

Pathology - This disease has been studied well, and on certain points all pathologists seem to agree - on others there are diverse opinions. Some say it is a change of the blood, others it is a nervous disorder, some one thing and others another. But there are certain pathological lesions on which all agree, that there is inflammation of the intestinal tract from stomach to anus, or may be at some point in that tract, as large intestine, small intestine or even the stomach. The mucous membrane becomes more or less reddened - congested -

The external coat of intestines generally congested. Peyers patches are always more or less elevated, all the solitary glands of small intestines are enlarged, as well as Brunner's glands; Peyers patches are not only enlarged but they undergo ulceration, the consequence of which is death speedily; You will sometimes find pus in these patches. There is upon the peritoneal surface an exudation of pale material, resembling the lather of soap; There is too an exudation of mucous membrane of stomach, of large intestines - All of the above mentioned changes I think are evidences of inflammatory action; There are cases in which those anatomical changes do not take place, the cause of which is evident - death occurring before these changes can occur

In ~~death~~ Cholera the death of the Patient is owing to the great effusion - he is too much depleted; these watery discharges, ~~the assimilative power of which~~, are albuminous and weakens him

so much, that he dies. You never have an epidemic Cholera unless accompanied by dysentery, but you may have dysenteric discharges replacing rice water discharges, these then must be inflammatory changes, being in direct ratio with their frequency and ~~quantity~~ quantity. It is the belief that Cholera is due to a specific atmospheric poison which cannot be detected by chemical analysis. It is received into the system through inspiration principally, but sometimes by fluid loaded with this poison taken into the stomach. When the poison is introduced into the system it seems to affect the ganglionic nervous system, upon which its violence is exercised; whether the changes produced are those of excitement or depression, I know not, but probably the latter, as is experimentally proven on animals. It is therefore a depression of nerve power that produces the changes of Cholera. We have three many roads to travel. I'll mention a few of the changes resulting from the depression of the ganglionic system. The Kidneys fail to perform their function

which can only be accounted for by the depression of their nervous influence. One of the prominent features then of Cholera is the arrest of the secretion of Urine.

Heart grows feeble in impulse; it is not due to depletion, because it grows feeble before the discharges commence but evidently owing to nervous depression, the feebleness of heart's action is the very first symptom of Cholera.

The Capillaries fail to perform their office, and the skin begins to grow cold, it being also an early symptom of Cholera, this being due to the same cause, in fact I might show, that the function of every organ was impaired by the same cause

Change that takes place in the blood. The watery elements of the blood are diminished in a remarkable manner, this change is not a primary, but a secondary effect [illegible]

you recognize a change in the blood. ("primary")
It is reduced from 790 parts to 650 in 1000 parts;
The blood is more solid than brain matter since
there are 750 parts water in brain matter; the
blood is so thick, if you cut a vein it won't
bleed; In addition to the decrease of water, the
salts of the blood, chiefly the Soda Salines, are
carried off; There is a very large quantity of
salts in the discharges of Cholera
It ~~There~~ has been recommended that Salines be
injected into the vein. It increases the patient's
pulse, it stimulates & refreshes him for a short
time, but I have yet to find a single well authen-
ticated case that entirely recovered by this method,
a subsequent depression always carries him
off. There must be something removed from the blood
before the Patient can recover. There is no Pathological

lesion of the brain

The liver has borne the burden of Cholera for a long time, but look at the record. You find it represents no disease of liver in case of Cholera. Does the liver perform its functions in Cholera? We have no evidence that it does. There is no bile in the discharges, the gall bladder is not distended with bile, but is with fluid, we are thus driven to the conclusion that the liver does not perform its functions for the same reason, that the kidneys ceased its operations

As soon as the poison is removed. We have the returning of the functions of the kidneys. The lesions are so formidable that you will not be surprised that no remedy has as yet been discovered; if we only knew the extent of this poison in the ganglionic nervous system, and could find an antidote, we

would have gained an important point, this would enable us to save men from Cholera, and nothing short of this.

Symptoms:— Diarrhoea from 4 hours to twelve days continuously. Whenever you find Cholera, you will find persons suffering from Diarrhoea; but it does not always precede Cholera. It is not a premonitory symptom of Cholera, nor is it a part of the disease, but in 90 pr. ct. of the cases the Diarrhoea comes before the Cholera.

In order to facilitate the study of the disease I propose to divide it into three stages. Collapse & Reaction. Rice water discharges are characteristic of Cholera; diffused through it are little flocculi resembling lymph. If you let the liquid stand for a while these will settle to the bottom, and the fluid above will be as clear as water,

No traces of bile in any of the discharges.
Nor do they have any fecal odor, the quantity
of the discharges vary from a small quantity
to a very large quantity, they are perfectly
painless, rather a relief than otherwise. No
smarting sensation after an evacuation; The
first thing the Patient feels is the sensation
of distention, which forces him to evacuate
his bowels again and again, Sometimes these
evacuations cease spontaneously. Then again
they continue incessantly; With these dis-
charges we will have vomiting, which is
neither preceded or succeeded by nausea; As
the vomiting goes on the Patient gets weaker
and weaker. These symptoms without pain
mark the Stage of "Invasion" - The symptoms and
then constitutes undoubtedly a clinical case of Cholera

This is the stage to arrest the disease in
& should bring to bear now all our available
means remembering this is the most favorable point
(lasting from four to 12 hours) and can be success-
fully treated here, if recognized, but in the
majority of the cases, unfortunately, it is allowed to
pass this stage, and ushered into 2d.

Collapse! — Which is by far the
most dangerous; the pulse begins to increase in
frequency and diminish in force now from 100
to 140, blood ceases to circulate in the veins,
the surface is of a dusky hue, the skin grows
cold, the abdominal muscles are contracted,
with occasional contraction of the muscles of the feet
and hands, and with these spasms pain comes, clammy
perspiration breaks out over whole surface, deglutition
begins, the skin becomes corrugated especially that of feet & hands

Countenance anxious from beginning, now assumes a Pathognomonic expression, the features are contracted – the very Counterpart of death – In a few hours he is so changed in Countenance that he seems to have passed a century; Listlessness now grows to indifference, his attention cannot be arrested by talking to him; When this stage is about completed the air we pour out of his mouth is cold, thirst is more intense he now cries for food, for water, his tongue is coated in the centre, but clean on edge & tip, and as death approaches it grows cold, voice is lost – respiration decreases, mind tranquil and he is conscious until death "knocks the Golden bowl and severs the cord"; neither the past, present or future disturbs him – look at the Strangeness of his altered Countenance – as he dies in a tranquil state – Duration of this stage 4 to 48 hours, ½ die in this time

Urine suppressed from the commencement of the disease: When the Patient is in the tranquil state he will refer to not passing his water; As soon as he passes from this alarming stage to that of 3d.

Reaction! — The secretion reappears ... on examination you find it loaded with albumen, You know then you have urea in the blood; My opinion is that Uremia has as much to do with Cholera as any other disease - We now have pain in the back, rapid pulse & delirium. warmth creeping through the limbs, as well as epigastrium high febrile excitement; Respiration returns with rapid dyspnoea; all these symptoms point ~~out to~~ recovery, but this stage is almost as fatal as that of Collapse - Why is it? We have a high febrile excitement, and a dry tongue (Typhoid symptoms) 2d. As we have respiration coming

we have delirium not easily controlled, the Patient must be watched carefully or he will die; but if attented to it generally subsides rapidly and the Patient recovers; The secretion of urine is going on. 3.d We have the febrile excitement more slowly developed, slowly the temperature returns to the body, with it comes a delirium, not as the other but of the form of "Sub acute Meningitis", which increases until the Patient falls into a state of Coma, when he is relieved by death. All of these three causes seem to be referable to Uremia. As reaction comes on you have a profuse secretion, which is heavily loaded with albumen, which you will find until entire recovery; the fatal cases in the stage of "Reaction" have no secretion of Urea. I speak so fully of the symptoms, in order to draw out others

on this fearful disease. If I could attract the attention of one young scientific Pathologists to this disease, fearful in the extreme, one too that has baffled the skill of all our eminent veterans in the science, I would feel that I had, for me, accomplished a great deal. Be come now to the causes of Cholera

Causes:— These are two. Exciting and predisposing. The exciting cause seems yet unknown, whether atmospheric poison or change in the air itself, I know not, But we do know something of the predisposing causes. It is a disease which prevails among those badly ventilated places & those persons badly fed, badly clad &c &c. Always commences there; always commences in the lowest, the worst & the filthiest part of the place, but after it has reached to a certain point

it will spread out to all places; the most elevated places are the points to keep from Cholera, rarely found 1000 ft. above the level of the sea; Warm climates are more peculiarly adapted to Cholera, fear too is one of the great causes, It is the timid that has fallen by Cholera the brave ever escapes its wrath. I remember portions of an allegory told by Prof. Loomis of U.N.Y. in support of fear being one of the causes but I fear the parts of it that I recollect will be unconnected and uninteresting? It runs some how thus. From a city of several thousand inhabitants, Commissioners were sent out to meet a plague, which was on its way thither they met the plague a few miles from the City under a "flag of truce", and after pleading at some length the agreement was made that the plague should destroy but 5000 whereupon

The Commissioners not wishing to see the 3000 destroyed went on their way, In the course of a few days however the Commissioners on their return met the plague leaving their City - and having heard of the destruction of lives beyond the agreement - they accosted the plague as to their fidelity to the trust - whereupon the plague answered - Sirs! - I done as I said, Killed 3000, but fear killed five & twenty Thousand - I believe it has a powerful effect, & would therefore urge upon my fellow students the necessity of discarding their profession if there remains one atom of timidity about them, or surely timidity. And doctors wont do to go together, it may some day cost your your life.

Contagion! - There has much been written on this subject, it is one of importance, as for myself I am confused; Is it a Contagious disease?

To account for the spread of the disease is, it seems, to account for its contagion, there are many facts that supports the supposition that it is contagious. Epidemic Cholera follows the great thoroughfare of travel in its migrations; It occurs in Cities generally, and if any one will they can generally trace the disease to an isolated case, and if the investigations are carried far enough, you will find that case to be imported, such is strong proof of its contagious character.

It seems to me the Choleric poison can be received into the system by poisoned water &c.

After a careful review I find that the weight of opinion is against the contagion of the disease; I prefer believing the same; I base my opinion on the following considerations viz.

1st Those about the Cholera are not most liable to the disease

In hardly a single instance when the Epidemic was in New York did a surgeon or nurse contract the disease; Compare it with Typhus fever, and you will readily see the difference.

2.° Imported cases, in situations where the disease has not been before, does not spread as an Epidemic

3.° Epidemic Cholera breaks out at different places simultaneously, where it is to become an Epidemic

4.° Cholera is diffused too rapidly for a contagious disease, in a single night perhaps you will have two hundred cases, Contagious disease don't spread that way

5.° It runs its course too rapidly and too completely to be contagious. 6.° Efforts to produce this disease by exposure have failed, all these circumstances have led me to believe that the disease is not contagious, or only under circumstances

or as I would term it "Contingent Contagion" -
As we have in "Puerperal Peritonitis" - It may be
contagious to a man delicate or with some con-
stitutional disorder. We have evidence that Cholera
is throughout the whole Country - Cholerine and
other indications point it out. I shall certainly answer
No: to all questions as to the probability of "Catching
Cholera"; It is not impossible for the poison to be
conveyed from place to place in clothing, and substances
around the patient; You cannot limit the disease to
Cities, but the external causes are prevalent in
Cities, and assists in developing the poison: The
poison cannot be arrested, but its causes can be
arrested by having the City properly policed, and
the laws of Hygeine properly carried out; It must
therefore be the duty of every Physician to use
his influence in having the engendering causes of

the disease removed. Perhaps I have dwelt too long on the causes of the disease, but there are so many different opinions on the subject, that I felt duty bound to give mine, which, I think, are founded on truths, if I have been tedious, I ask nothing more than a review of the mortality of the disease, and then I know I will be pardoned for its length. I now pass to the "diagnosis."

Diagnosis:- It is comparatively easy after the disease has reached the 2d. stage, but we should recognize it in the 1st. if possible. It resembles "Cholera Morbus", in that there is vomiting, purging great prostration and Cramps but differing in the matter ejected from the mouth and rectum, true Cholerac discharges being free from bile. The collapse is quicker and more severe in Asiatic Cholera, than in "Cholera Morbus". Cholerine differing in the faecal odor.

the true Cholera having no faecal odor and perfectly white, while the Cholerine is of a yellowish hue, I mean the discharges.

To one familiar with medicine and disease can hardly fail to recognize a genuine case of Cholera in an instant; And one altogether ignorant can distinguish between that disease, and the only one, with which it can be confounded — Diarrhoea —

I now pass to the prognosis of the disease

Prognosis —: Fatal according to record in 25 to 33 pr. ct. of whole number attacked, the greatest mortality being between the ages of 35 and 40. In a disease where the mortality is so great can I be censured for casting in the widow's mite to the relief of our fellow man. How happy would I feel, if I could but get some enquiring mind to penetrate the depths of a disease, that so often removes our fellow beings, I now pass to the Prevention of the disease.

Prevention of Cholera:- In the first place we must remove the exciting causes, next attend to the premonitory symptoms (Diarrhoea), Check it as quickly as possible, if it is checked permanently Cholera will be prevented this is a universal rule, Some go so far as to assert that the stoppage of Diarrhoea arrests Cholera after it has taken hold. The preventive Treatment then is the treatment of Diarrhoea, which is simple. Tinct. Catechu, Tinct. Camphor, Tinct Opium equal quantities, half Teaspoonful of the mixture for a dose. Of the Cholera Medicine, as some call it, which is only the above prescription with a few drops of Capsicum in addition. Acetate of Lead is good. It seems to be the duty of every Physician to impress on every Citizen the necessity of arresting the premonitory symptom, and have the laws of Hygiene properly carried out. Another preventive is to move out of the district, or from the limits of the disease. Those that have nothing to force

them to stay, it must be a sanatary means for them to have. The part just spoken of seems to me, to be by far the most important part of the disease, for to cure Cholera is no easy matter after it has reached the 2d. Stage, and I may say the 1st, but the means for preventing are so simple, that it is almost suicidal for any one to die with Cholera; Then we must treat the Diarrhoea, which I have given above.

I now pass to the last division of my subject

Treatment:— I hardly know what to say, It is in utter confusion; The host of remedies that have been employed seems to be useless to any Practitioner; The Materia medica has been uprooted, the remedies have been used to no effect, many does more harm than good. I find in a Med. Journal a very extraordinary remedy "Hogs bristle & the hair on a Cow's tail burned to Cinders" the efficiency of which is equal to a great many other remedies in this disease. There has been no specific discovered for Cholera

At one time all intelligent Practitioners believed in General blood letting in this disease, but that theory has justly been abandoned.

Pereira states that he cured 19 out of 20 cases by large doses of Calomel; There were some in the City of New York at one time, that believed Calomel in doses of 10 to 100 grs every hour would certainly cure a case of Cholera.

There are others, that say the Cal. plan of treatment has caused more deaths than the disease itself; I was under a like impression until I heard the able Lecture on 31st Jany. by our very distinguished Prof. of Practice, he gave us the benefit of his protracted experience in the Treatment of this disease both in the Tropics & elsewhere, and he says he finds more benefit resulting from the Cal. plan of treatment than any other - his Perscription is Cal. 1 gr. Chalk gr. j every hour until the stools show bile, he at the same time urges complete rest and quiet, Good Hygienic treatment. In severe pain opium. Simple rice & tea for nourishment; I cannot

turn a deaf ear to such teachings, but will promise my 2.° case to the trial of this plan as my first is promised to my own treatment, which I will mention before I get through, The one that leaves me safely over the rough road after repeated trials I shall adopt, and I know if I could live to my worthy Teacher, that my treatment was the best he would readily acquiesce.

There are those, who believe Quinine in large doses will cure 1 out of 20. The testimony in N. Y. is against it, That of Philadelphia favor's it. It really seems to me Quinine must add fuel to the flames.

Cathartics & Emetics have both been applauded, but meritoriously died a natural death, they are not only inefficient, but really dangerous.

In Brooklyn N. Y. the Plan is no treatment at all. They leave the Patient alone, Keep him quiet, Cover him well with blankets, their Statistics show a good results. I look upon the remedy good only so far as compond with the majority of remedies now used.

Dr. Stephens recommends the introduction of Neutral salts, he says he can cure 90 pr. ct. of the cases by this treatment, he uses Seidlitz powder with Rochelle Salts - Sinapism over the stomach, If pulse feebrile & quick he uses the following perscription. Muriate Soda ℈ ; Carb. Soda ℈ ss. Chlorate Potas. VIII gr. every half hour - I think my 3d. case will be given to this plan as I place confidence in it to some extent, but it is not my plan. Carb. Soda in large quantities to allay irritability and to produce a cooling influence on the stomach has been given, and when this failed Tartrate Soda, in state of effervesence was given

An enema of large tablespoonsful of Muriate Soda in hot water & starch, as hot as the Patient could bear it has been used, but no intelligent Physician advocates such treatment.

There are many other treatments. Stimulants, such as brandy in large quantities. Electro plan, by which they are electrified. Oxygen plan, inserting oxygen into lungs. &c. &c. All have been resorted to with little effect.

When I look at the complete upsetting of the Materia Medica by the wisest and best of our profession, and all seem to fail; I can but think it my duty to go further and try and try again until we finally reach that point, at which we can save the perishing of so many souls from this dreadful disease

The question naturally arises- What will you do when first called to a case of Cholera? I recognize three distinct and separate stages, all of which have been fully explained and dwelt upon, and I think the treatment should correspond to the requirements of each stage separately.

1st Stage- Invasion-; My first aim would be to arrest the Intestinal discharge, if I can do this before the change in the blood has taken place My Patient is safe My chief anchor in this stage would be Opium, I would regard moments as precious as diamonds, and try and prevent the disease passing into 2d. Stage- or Stage of Collapse- to do this I would give gr. ¼ Morphia dry upon

the tongue, if rejected I would repeat it, if retained I would repeat it every half hour until the discharges were arrested; If the Morphia was rejected by the stomach, I would administer by rectum or hypodermically, I would bring my Patient under its influence as soon as possible, It is impossible to Narcotize him - he must be restricted to very little fluid, I would give him little ice, and occasionally a little water, I would urge complete quiet and rest, I would advise him to resist as much as possible the desire to evacuate his bowels, and if they are to be evacuated at all, he must not get up to do it, as the poison is on the Ganglionic Nervous system, and every movement would increase the fever; I think for this stage this plan is not only the best, but the most popular treatment, and evidently the most rational, I shall adopt this the first case I have. 2d. to Prof. McHenry's plan. 3d. Stephens plan. I will try each over and over again until I am satisfied of the benefit resulting from each, then stick down on one. (the best)

2d Stage

Stage of Collapse — My "usual horse" will not do in this stage to such an extent as I used it in the first, it is not only ineffectual, but dangerous, the system being susceptible to Opium; It interferes with recuperation; If the discharges still continue it is necessary to arrest them if possible, but I would not give Opium as I did before, if I did I would Narcotize my Patient; Changes are now going on, the poison is in the blood, the great danger is Coma, which may be caused by Uraemia, Blood to the brain or Serous effusion, Ergo I would not give Opium. What must I do? The great point to be accomplished is to assist Nature in restoring Circulation, I would therefor adopt external heat as best mode, Cover the patient well, and place bottles of hot water all around him, I would use frictions, but not violent, I would rub the surface gently with a mixture of Tinct. Capsicum & Alcohol, It is highly recommended in Cholera Infantum also. diffused Stimulants of

Spirits and water can be given as much as they can bear; Nutriments, I would use to any extent I would introduce fluids of any kind, that would not cause vomiting, and in as larger quantities as possible into the Stomach. I have dwelt upon the treatment of this stage, but I must confess when the Patient gets there he is in a gloomy condition, I would urge all them to "make hay while the sun shines". Arrest the disease before it gets dark, for when dark cometh the danger is by far the greater.

3d Stage or Stage of Reaction! — I have only a few words to say in the treatment of this stage; The condition will suggest the treatment. Our great object is to support the Patient. I would give him Nutritious and Stimulating diets to assist nature, I would administer mild diuretics, also mild Counter Irritation over Kidneys In order to restore the secretion of Kidneys, I would palliate the symptoms as much as possible. This seems to me to be the most rational plan of treatment

Gentlemen of the Faculty.

I have submit to your examination a Thesis written from personal observation. This serves as a farewell address. In taking leave of each of you allow me to express my heart felt thanks for the strenuous exertions (efforts) you have made to fit me for usefulness in after life: If we are not competent now to fill that high calling which heaven has ordained us to fill, no fault or censure can rest upon you. Should any seeming trouble ever result from my strenuous labors while with you, it will be a source of pride for me to give you a history of the miraculous event.

Collectively. Farewell -! May heaven's choicest blessing ever rest upon you

W. T. Everett

Selma, 14th 1867

AN

Inaugural Dissertation

ON

Remittent Fever.

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

Thomas H. Green

Of

Queen Anns Co., Maryland.

Session of 1867-7

Remittent Fever.

I have chosen for the subject of my Thesis the Endemic disease of our latitude, or rather I should say of our part of the State of Maryland, not that it is peculiar to Maryland, by no means, for it prevails to a greater or less extent over the whole Southern States Wherever the Combinations necessary to give rise to the Malarious poison is to be found. But it is very prevalent in our midst particularly in the Autumn and latter part of Summer, constituting almost the only disease of that Season.

Symptoms. The disease generally comes on with a feeling of depression, Lassitude, loss of appetite, disordered taste, pains in back, and limbs, headache, and a general feeling of wearing as though brought on by general fatigue. This may go on for two or three days, when the patient is seized with shivering, chilly sensations which

gradually become more violent until his teeth chatter and he cannot control himself, thus the fever begins. At other times it commences abruptly with a chill followed by a hot burning fever which after a longer or shorter time gives way to the third or sweating stage. The duration of the chill varies from a few minutes to an hour or more, but seldom so severe or long as in the Intermittent form. Very often the only sign is a feeling of chilliness alternating with flashes of Heat. For some hours after reaction the patient is subject to these chilly sensations whenever the body is brought into contact with a cooler part of the bed. When the fever comes on the patient feels uncomfortably warm, the skin hot and parched the surface reddened the respiration hurried, pulse frequent and full and often in force. These symptoms

continue for considerable time without abatement after which they begin to subside with the appearance of moisture about the neck and face gradually increasing until the whole surface is covered with perspiration, when the patient feels relieved and falls into a quiet sleep, from which he awakes refreshed and much improved. This is the remission.

Bilious Fever is variable in duration, being longer or shorter according as the type of the fever may be Quotidian or Tertian. Another paroxysm of fever takes place accompanied with the symptoms above described and terminating in the same manner in another remission, and thus it goes on each exacerbation being more severe and protracted and the remission less decided and shorter until the disease reaches its height. Though the remissions

are still distinct, yet it often happens that they are to the contrary, and the only evidence of the remission is that the pulse beats a few strokes less the skin cooler and the general feelings somewhat less in the morning than at any other time during the day.

Bilious Fever is often accompanied with inflammation of one or more organs, in these cases the pulse is more frequent the tongue is covered with a yellowish white or white fur and as the disease progresses becomes brown or black particularly down the centre. In mild cases it is usually moist in more severe it becomes dry and sometimes chapped it becomes swollen in consequence of which it becomes distended beyond the teeth, sometimes uneasy sensations at the root which causes the patient to hawk and to spit up a glairy mucous accompanying

these Sensations there is tenderness upon pressure in the Epigastric region sometimes so severe that the patient complains of the Touch, also a feeling of fullness in the region of the Stomach and a burning pain in very severe cases. The pain and tenderness are not experienced to any extent for three or four days, but are apt to increase with the progress of the disease. Connected with these symptoms there is an irritable state of the Stomach, nausea and vomiting, these may be present at the beginning, but more troublesome when the disease is at its height. The matter ejected is usually Yellowish, greenish or brownish black color, with a bitter or acrid taste; sometimes mucous at others whatever is swallowed. The Stomach often in such an irritable condition that it is with difficulty that you can get it to retain Medicine. The bowels constipated but easily oppera

ted on by remedies producing free discharges of a black color and very offensive, sometimes presenting different colors. There is in some instances looseness of bowels commonly known as Bilious diarrhea. The urine in this disease is yellowish brown or red and turpid. In all cases where the paroxysmal form is distinct it has a tendency to become more copious during the remissions. Looking clear when discharged its deposit a brick dust form on cooling.

Following the symptoms on down we find that the nervous system participates to a certain extent there is headache accompanied by vertigo with buzzing or roaring in the ears and intolerance to light or sound, beating of the carotids redness of the conjunctivas, flushing of the face indicating a strong vascular determination to the brain if not positive Meningitis. Delirium may now set in, being governed by the severity

of the disease, showing itself by confusion of thought when the patient awakes from sleep. Drowsiness or Stupor. Such are the symptoms which attend Bilious Fever when fully formed. Various other phenomena occur which it is unnessary to mention as they are not in any respect peculiar, and are liable to be present in any febrile attack. If the disease retains a distinct paroxysmal character, it generally runs on for two or three weeks, when it terminates either spontaneously at the end of one of the paroxysm or passes into the intermittent form, or in a low Typhoid affection. When the disease is to terminate favorably there is a gradual abatement of all the symptoms. In some cases the disease assumes a new form much resembling that met with in Typhoid Fever. The skin hot,

and dry, the tongue brown or blackish color, sordes collect around the teeth. The bowels loose or to the contrary. The urine scanty, or suppressed Stupor or low delirium, picking at the bed clothes slipping down in bed, the patient thinking himself in a strange place. When the fever takes on this character it is much protracted. In favorable cases the Tongue becomes moist begins to part with its fur and looks red and smooth and convalescence may be looked for. It is useless to detail the various appearances described by various Authors, as exhibited in different places and under different circumstances. The disease as I am speaking of it, is the mode in which it makes its appearance in this climate. The duration of Bilious Fever is various terminating sometimes as early as the fifth or it may run on to the fourteenth day, or its duration may be longer running on for three or four weeks.

The Convalescence in Mild Cases is often rapid and favourable, but where the disease has been protracted and some organ has received severe injury the return to health is varied. The Appetite is languid, digestion imperfect, and the bowels constipated. Copious night Sweats may serve to weaken the patient and assist in keeping up the feblenefs.

The Anatomical Characters presented in disease are an enlargement of the Liver and Spleen. The Liver presents a darker brown appearance, the Gall bladder is filled with a dark or black, viscid bile. The Spleen is usually to several times its natural size.

Diagnosis. The diseases with which Remittent may be confounded are Intermittent, Typhoid. The diagnostic sign

between Intermittent and Remittent Fevers is the continuance of fever during the intervals. From Typhoid Fever it is distinguished by its more regular and decided intermissions, by bilious vomiting, and yellowness of skin which usually attend it, by its shorter duration and its tendency to end in Intermittent Fever. The initial Stage of most Fevers has so many symptoms in common that it is hard to discriminate between them. It is always best in forming a judgement of a disease to know whether the disease is prevalent or whether the conditions necessary for its production are present and whether the patient has been exposed to the cause of it elsewhere.

Prognosis. This is always favorable in the milder forms unless by some means they should be

mismanaged. Patients who become derelict to the order of their professional advisers sometimes brings upon themselves the worst form of the disease and may terminate unfavorably. Simple Cases are often treated without advice from a Physician.

Treatment

This depends entirely upon the Condition in which the patient is found, when called upon by the Physician. It does not often happen that a Physician sees a patient in the Cold Stage. Which, as a general rule is very brief. Sometimes the Chilly sensation is prolonged or Severe, when it will be necessary to employ Remedies. Emetics, under these circumstances have been recommended to rouse the System from its torpor; The best is Ipecacuanha or Sulph Zinc. External Stimulants are the best, and safest.

Hot bricks, bottles of sand heated, bottles of hot water and the hot bath has been recommended by some. If Internal Stimulants are employed Carb Ammonia, Oil Turpentine, are preferable to alcohol as not likely to affect the brain. The treatment that is usually began with and the one which is more closely followed by all Physicians is to give an active Cathartic to clear out the Prima Via. Calomel is one of the best purgatives that can be given combined with some other mild purgatives such as Rhubarb, or Jalap, or Ext Colocynth, or in the form of the Comp Cathartic Pills. This remedy may be used whether the patient be seen first during the paroxysm or remission The Mercurial pill. Combined with one of the above remedies. After the bowels have been thoroughly evacuated it will be sufficient as

a, general rule. It may become nescessary to follow with Sulp Magnesia or some one of the Saline drugs. After this treatment has been gone through with, and it is the one that is generally conceded to by all Practioners. The next remedy and the one to which the most importance is attached is the Sulp Quinine. From Twelve to Twenty grains given in divided doses during the remission, will often be sufficient to prevent the paroxysm; and if not, a repetition of the same amount in the next interval will rarely fail. In some cases, the Sulp Quinia is of the utmost importance recourse should be had to the remedy, in the remission, however imperfect, it may be. In Gastric disorder where there is occasional, retching and vomiting of bile, relief may be afforded by draughts of warm water, Chamomile Tea. In the

early stages of the disease when the head is hot and very painful. Ice may be applied Cold water cups or Leeches to the temples, blisters are also useful. In Nervous disorders, Hoffmans anodyne, Sweet Spt Nitre, Camphor Julep, Camp Tinc Opi. In Convalescence it is very important to regulate the diet, both as it regards quantity and quality. Bread and butter, buttered toast, or Milk Toast; boiled rice, weak broths, beginning with the lighter, and gradually rising to the more nutritious substances.

Etiology.

Whatever is capable of deranging any one of the vital functions of the body is capable of producing disease. These therefore are numerous, and be considered as embracing everything in Nature or at least those which are brought into relation with our bodies. Thus attemps have been made

to classify them. First is heat, cold, water, light, Electricity, Atmospheric impurities, Malaria or Miasmata and so on. The one which we have to deal with most, as embraceing the cause of the disease which heads this Thesis is Miasmata. The question may be asked what is this Miasmata, and what is the cause that produces it, and how does it effect the Human System, so as to bring it, under the influence of the poison and produce the disease in question. The word means bad air, or a species of air which produces, or tends to produce disease. It has been observed that, in certain districts of country where there is an occasional overflow of the soil, and is accompanied with abundant vegetable decomposition, and at the season when this decomposition is most rife, a certain class of diseases are apt to prevail, distinct from those

which arise from impurities or irregularities in the atmosphere. The circumstances that are essential or appear to be so, to the production of Miasmata are Heat, Moisture, and vegetable decomposition. A continuance of Heat is not less so than a certain degree. Moisture is necessary, but may sometimes act as a preventive. During heavy rains for example their morbid effects are less felt, than after rains have ceased. Vegetable decomposition has been mentioned as one of the causes, that it must be so is infered from numerous circumstances attended on the development of the cause. Of the precise nature of Miasmata nothing is certainly known. Even the existence is denied by some. But the disease has been traced and taught to be the result of vegetable decomposition. With regard to the Hygiene of the disease, I shall have but little to say for

the Etiology which Teaches us the Hygiene is wraped in such obscurity that Nothing very definite can be said of it. I believe that Authors speak of the poison let it be what it May, as being unable to ascend very high above the surface of the earth or those drain boys or Marshes from which it emenates and this they call the "Ague level" persons that reside above this level are seldom or never affected by any form of Bilious fever, again they say that the heat of the Sun dissipates the poisinous Vapors, Exposure to the hot Sun itself predisposes strongly to the disease, although it is not an exciting Cause, looking upon these rules as being correct, we should advise for those who are peculiarly subject to this complaint, and able to do so to remain during the Months of August, Sept & Oct in districts above the level of "Ague line: But for persons that are Compelled to remain we can do no More than

advise them to be careful on all causes that will be liable to exert an influence on the body, not to expose themselves to night dews or fogs. Over exertion or long continued labor in the hot sun, not to go out too soon in morning, to keep the digestive apparatus in good condition. Not to indulge in intemperate eating or drinking, regular hours for rest, and in short to avoid all causes calculated to depress the system. Of course my experience has been very limited for until recently my observation has not been directed to this or any other disease, therefore I hope you will excuse any imperfections or negligence in this paper

James Gore, M.D. Reisterstown, Balt'o. Md
1866-67.

Typhoid Fever.—

This is a common continued febrile complaint, presenting a diversity of symptoms common to all its sister fevers in the early stages, but as it advances it presents peculiar phenomena, signs and symptoms, characteristic of itself, and which makes its diagnosis generally easy.

It is a fever common to both Europe and America. In Europe it is the ordinary endemic, and in America it most generally visits those portions in which

bilious fevers do not prevail, but it sometimes pervades the bilious district in common with the miasmatic fevers and by so doing, it increases the liability to disease, thereby augmenting the number of attacks and—by a combination of the symptoms of both affections—places the constitution in a more dangerous condition and consequently, rendering the disease more fatal.

Symptoms; The disease sometimes begins very suddenly with a chill followed by the different symptoms of fever in regular order; at other times it comes on more slowly and regulars which is generally the case

in this country so that it is almost impossible to fix the precise period of commencement.

At first the patient complains of the premonitory symptoms common to all fevers, being generally indisposed, weary, uneasy, with headache and pain in the extremities; the skin becomes hot and dry, the face flushed, the tongue slightly furred with the pulse accelerated. The appetite is impaired, sometimes almost if not entirely extinguished, with thirst and general weakness.

As the disease advances the symptoms become more exaggerated, the pulse become more frequent -

and less strong; the tongue, still remains covered, but shows an inclination to dryness by the edges and tip becoming red; the countenance becomes more obtuse and complexion dusky; the stomach though often retentive is sometimes irritable; diarrhoea is not unfrequent or at least the bowels are very easily acted upon by purgative medicine.

Pains are felt in the abdomen, increased on pressure, particularly in the right iliac region, and a slight tympanitis with a gurgling sound may occur at this time though more probably not until later. A cough frequently sets in either dry or moist and the stethoscope will most generally

direct the physical signs of bronchitis.

Such is generally the course of the disease until the eighth or ninth day, when if it still continues other symptoms are superadded.

The tongue, previously moist and clammy, becomes dry and assumes a brownish color. Deglutition becomes more difficult; the tympanitis increased. If the skin be examined at this stage, small specks like flea-bites will be observed and at the same time there is often an eruption of small vesicles called sudamina upon the neck and upper portions of the body.

Derangement of the nervous system increases. Delirium and stupor

take the place of the previous headache with a ringing and buzzing in the ears which often produces hardness of hearing and sometimes even deafness.

If the disease ends fatally the symptoms present a more decided character; the pulse becomes more frequent and feble, the surface either universally hot and dry, or hot in some parts while it is cool in others and a peculiar unpleasant odour often exhales from the body, subsultus tendinum supervenes, The patient lies on his back, frequently slipping towards the foot of the bed, He picks at the bed cloths and imaginary objects, mutters half formed delirious sentences and

Sometimes rises from his bed, but before proceeding far becomes utterly exhausted and falls to the floor.

Finally the pulse gives way, it becoming frequent and feeble or slow and imperceptible, the skin is covered with a moist clammy sweat, the extremities become cool, the abdomen enormously distended and sometimes hiccough. The countenance assumes the Hypocratic aspect—and life passes quietly and almost imperceptably away. Sometimes, however death is preceded by painful struggles and convulsions.

When a favorable termination is expected the pulse become full

frequent and more full; the tongue becomes moist and commences gradually to clean itself at the tip and edges; the abdomen gradually grows smaller and tympanitis decreases; the delirium, if it exists and the patient exhibits an inclination for food. Under these circumstances convalescence speedily takes place.

Some few symptoms are so peculiar and diagnostic of this disease, that we will notice them separately.

Diarrhoea; by some authors is considered as a symptom accompanying the affection, by others it is thought not to be a necessary symptom though

it would most generally occur with the fever. One thing is true, that is, the intestines are always more perceptable to purgative medicine.

The rose colored eruption is one among the most characteristic symptoms of enteric fever. It consists of small, round, red spots, often slightly prominent, disappearing on pressure, but to again return after the pressure is removed. They are not present at the commencement of the disease but are observed later about the tenth or fifteenth day. They generally ~~generally~~ occur first and most numerously on the abdomen extending thence over the inside of the

thighs, on the arms and sometimes even to the face and back.

Hemorrhage is a common symptom of this fever. In the 1st stage it occurs from the nose, bowels and is highly characteristic. The quantity differs from a drop or two to an alarming extent, diminishing the interference of remedies.

Hemorrhage from the bowels is more important to the physician as well as more dangerous to the patient. It is always considered a bad sign and is highly injurious by the exhaustion it produces. The color and condition of the blood differs. In some instances it is red and but slightly changed,

Ulcers it is blackish and dis-
integrated showing that a considerable
destructive power is being developed
in the intestines which demands
the strictest attention and interference of the practitioner.

Pathology: The disease is so peculiar
in its nature that it sometimes affects
every organ of the animal economy.
At other times it is confined, attacking
only certain organs, producing
anatomical changes which are characteristic
of the affection and which are
so seldom wanting that they may
be considered as a most essential.
Such is the change produced in the
aggregated mucous follicles, situated

in the ileum, denominated the glands of Peyer. These glands, after the first day, exhibit different degrees of inflammation, varying from the size of a pea, to an inch or an inch and half in diameter. Louis divides them into two kinds, the hard and soft. The hard may either end in resolution or ulceration; the soft always ulcerate. This ulceration may be only of the mucous coat, though it may extend to the peritoneal, thereby opening a communication to the cavity of the peritoneum, rendering the case very dangerous and generally fatal, owing to the subsequent inflammation which under such conditions is

always liable. Other changes may occur; the liver may be altered in consistence, becoming softer, as also the Kidneys. The Spleen is enlarged and softened sometimes five or six times larger than in its normal condition. and resembling a clot of blood, allows the finger to pass easily in every direction.

The mesenteric glands are always effected along with the mucous follicles, being larger swollen and tumefied and sometimes exhibiting traces of pus.

The blood occasionally is but slightly different from that drawn during health; but it is most generally impoverished & depraved. It coagulates firmly

and unless there is an accompanying inflamation such as pneumonia or pleurisy it exhibits very slightly the buffy coat. In low typhoid cases the blood is but very slightly coagulable and the proportion of fibrine is generally smaller than during health.

Cause: The cause of this fever is but imperfectly understood. Some authors assert that it is contagious; others that it is not. Under certain circumstances it is no doubt contagious, for instance, when it prevails in large hospitals in which a great number of patients are confined. Whether contagion exist, it may, by adding to the

vitiated state of the atmosphere its contaminating [illegible] to become a source of infection. On the contrary it has been known to attack persons remote from any such infectious influences; facts in which we have reason to believe, it has been conveyed neither by the mediate or immediate disease. Dr. Wood, says, "there is an inherent predisposition, which is liable to be called into action, by any exciting cause".

Treatment. In the early stages of enteric fever, if the stomach is oppressed by food, along with absence of diarrhoea, a mild cathartic or an emetic, followed by a mild

purgative, may be given [illegible]
[illegible]
[illegible]
under [illegible] to the in-
fluence of purgative medicine, it is
not advisable, as in other forms of
fevers, to begin the treatment with
an active cathartic.

Our next indication is to obviate the
febrile excitement; this may be done,
if the patient be plethoric, by ab-
stracting a few ounces of blood.
Refrigerant diaphoretics also may
be used, in fact, they should be em-
ployed at the very onset of the
fever. Small doses of the antimonial
[illegible] pain in the

become manifest,

All night if there is no great determination of blood to the head and

and surface, with moderate quantities

[illegible]

[illegible]

[illegible]

Local effections if ex[illegible] [illegible] next demand attention; [illegible] [illegible] may be mitigated by the ap[illegible]tion of leeches to the temples; [illegible]rea, if exhisting, may be checked by small doses of opium and ipecac, [illegible] [illegible] [illegible] [illegible] [illegible] r tannin.

[illegible] supervene under this treatment and other symptoms become manifest, [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] Wood, [illegible]
and commences shedding from the
[illegible], in [illegible]; the
condition, he says, indicates an ulcerative
[illegible] in the [illegible], which should
be promptly met by the administration of turpentine, in doses
of from [illegible] to [illegible] every
hour until the tongue becomes
moist and other favorable symptoms
appear. This remedy is also indicated
when Cynanites exists.

Opium is a good [illegible] in this
disease when the pulse is weak, the
skin dry and the blood [illegible] paired
together [illegible] for muttering delirium,
subsultus tendinum and other nervous

[illegible]ptomes indicating an adynamic condition. [illegible] [illegible] lent combination.

[illegible]

[illegible] in doses of 5-6 [illegible] diluted with water and with very good effect.

[illegible] the system is generally [illegible] wine, brandy and ammonia should be given.

My preceptor (Dr. Dickson) has also used nitro-muriatic

used in the treatment of this disease in the first stage of convalescence when the patient is weak and the system prostrated and with a very decided beneficial effect.

In no case in which he used it has there been a failure of speedy recovery.

During convalescence, dietetic and hygienic rules should be observed. The patient should be kept in an apartment freely ventilated; if during summer, the windows may be lowered, so as to permit the free entrance of air; but by no means should a current be permitted to pass immediately over the patient.

The diet should be nutritious. At first small quantities of chicken or beef broth should be given. This from day to day may be increased so as gradually to accustom the stomach to larger quantities to meet the demands of the system. Pure air and good nutritious diet are essential to a happy and speedy convalescence.

With much respect and esteem I ascribe &c.

James Flora

An

Inaugural Dissertation

on

The Red Globule of the Human Blood,

Submitted to the Examination of the

Provost, Regent and Faculty of

Physic,

of the

University of Maryland.

For the Degree of

Doctor of Medicine,

by

John V. Berney

of

Montgomery Alabama.

Session 1866.67.

The Red globule of the Human blood.

When the human embryo becomes too large to be sufficiently nourished by the aliment supplied by the yelk, its further growth requires a system of vessels through which nutritious fluid can be conveyed to the tissues.

About the third day in the embryo of the chick the Amnion is formed.

Opportunities for determining the exact time in the human embryo have been too limited to arrive at any certainty in regard to it. One instance is reported in which the development of the human ovum had passed but little beyond the unfolding of the blastoderma, at which time, by the best attainable evidence, the ovum had been in the cavity of the Uterus not more than

eighty hours - Michels Vol. XIV. A. M. Journal.
It is at this period that the want of a vascular system is felt. In that part of the vascular laminæ of the germinal membrane which surrounds the embryo, vessels are first found which then form a net-work, bounded by a circular channel, the area vasculosa. The first blood corpuscles are formed from the nuclei of the primordeal cells of the germinal structure; and it is in the mass of cells which form the rudiment of the heart that the metamorphosis first takes place. The inter portions of the mass are transformed into walls for the cavity which is made by the breaking down of the internal parts, at which time some of the primordeal cells are converted into blood-corpuscles, and the remainder

deliquescing contribute to the formation of a fluid in which the corpuscles float. These are the primitive blood corpuscles.

Smaller blood vessels are formed in like manner, the primordeal cells forming in rows, their centres deliquescing &c.

These corpuscles are large, colored, vesicular cells, containing a yellowish fatty like matter, particles of which are quadrangular and flattened: among these particles each cell contains a nucleus, which is sometimes almost concealed by them. At the maturity of the cell it ruptures setting free throngs of germs, which passing through the same process as the maternal, in turn hatch broods. The corpuscles thus formed are circular, disk shaped, and full colored, 1 - 2500 inch in diameter. Nucleus

1-5000 inch in diameter, central, circular, little prominent and slightly tuberculated. These are the first set of Red Corpuscles.

By the second month of embryonic life, they have disappeared, having been gradually superceeded by Corpuscles developed from Lymph and Chyle Corpuscles, which are emptied into the circulation. Thus it will be seen that the whole of the Corpuscles which circulate through the embryonic system, before the beginning of the third month are red and contain nuclei. It was thought to have been proven that in all ordinary blood, Corpuscles are present which exhibit all the intermediate gradations of development from the Lymph and Chyle Corpuscles to the true red. The frequent reddiness of the contents of the Thoracic duct which

appears to be produced by the formation of Haematin in some of the floating corpuscles; and the progressive transformation from one form to another in the ascending scale of animal existence, appear to sustain the opinion to the effect that, red corpuscles are continued by development of the Chyle corpuscles to maturity, and that the white corpuscle is only an intermediate form in the transition. The idea that the red has the power of reproduction by subdivision, is not at present entertained by any Physiologists. In accordance with this theory it becomes necessary to account for the presence of the white corpuscle. Nutriment enters the System in several ways; one of which is by the gastric digestion, where certain portions of the contents of the Stomach are dis-

solved; i.e., brought to the condition in which they are soluble in both water and blood. These are the parts which the blood-vessels, ramifying over the stomach absorb and carry into the circulation.

Digestion of fats and oils does not begin until the food has reached the duodenum, as it is only after leaving the stomach that emulsion is formed. The special duty of the Lacteals is the absorption of fats, these vessels being distributed over the intestines chiefly below the entrance of the pancreatic and gall ducts, it is not until the contents of the tube reach this point that the digestion of fats begins: the Lacteals further take up such portions of the Chyme, as are destined for nutrition, and not appro-

ferialed by the blood vessels. Lacteals are minute tubes communicating with the contents of the intestine by means of villous projections into the mucous coat. The villi are covered with a smooth coat of cylindrical epithelium, and are internally supplied with blood vessels. They have no direct opening into the intestine, but absorb therefrom by virtue of their molecular porosity, called infiltration or intrusion, thought to be facilitated by the presence of bile. It is through the channels of these vessels that oil and fat pass to the circulation. The contents of these tubes is chyle, in which float many colorless corpuscles which appear to exert some necessary influence over it. Chyle is compelled to travel slowly through long and

tortuous tubes, mesenteric glands, the peculiar arrangement of which is for compactness. These glands are filled by a pulpy mass freely supplied with blood vessels. Near the villi, Chyle is an albuminous fluid, holding globules of fat in suspension. After passing through the glands where the influence of the plexuses of Arterial vessels is felt through the delicate walls of the tubes, which have been deprived of their outer coat, albumen declines, fat globules diminish in number, fibrin is formed, and coagulation will take place with separation into clot and serum

The white Chyle corpuscles as here seen are known, when they reach the blood circulation, as the White Corpuscles, and destined to become the true red, from

which they differ in color, size, in being spheroidal in form, and granular.

By the action of water the nucleus of the Chyle Corpuscle becomes more distinct. But in Acetic acid it contracts and sometimes leaves the cell. The great purpose of the Lymphatics is to collect aliment as it exudes from the Blood vessels, or is thrown down by the disintegrating process in the tissues, for the purpose of reconverting it into fibrin, which is done in the same manner as in the Lacteal system: For after passing the glands, Lymph becomes rich in fibrin and will coagulate.

Lymph and Chyle are poured into a common apartment, - Reservoir of Pecquet, Receptaculum Chyli, from whence, by the Thoracic-duct, it flows on to empty

into a vein. This motion of the fluid is caused by the pressure of accumulating fluid in the origins of the tubes, and is greatly assisted by the communication of the tube with a larger vessel, or the hydrostatic principle described by Venturi—

Moreover, the tubes are elastic and furnished with valves, which render any impulse which may act, available in promoting its passage to the Subclavian— At the point of junction two safety valves are stationed. From the moment of entrance into the vein the fluid becomes blood, in which float the white corpuscles, which, although the origin of the red, are only perfected after many rounds of the circulation. This gradual transition may be thus described:

1st Lymph and Chyle corpuscles are

tuberculated, containing many granules, and darkly shaded. 2nd They become smoother, paler, less granular, and more dimly shaded. In these two stages the walls can be raised by the action of Acetic Acid, or in the continued presence of water. 3rd At this time the cell walls cannot be raised by the action of water. They acquire a pale blood tint, and granules vanish rapidly. 4th A single granule remains, and the color becomes deeper. 5th Complete red Corpuscle, bi-concave, non-nucleated, & non reproductive. Although in the fully developed red Corpuscle there is no nucleus, still there are some which contain nuclei; but it only occurs in the incomplete state of the Corpuscle, a condition between the white and

matures red. Absence of the nucleus, marks a higher degree of formation, a more advanced development than that which obtains in the blood Corpuscles of the lower Vertebrata, or in the early Conditions of the highest. At the full development, the nucleus having attained its object, its presence is no longer necessary, and it is resolved into part of the homogeneous Structure of the Corpuscles. The form of the red Corpuscle Changes in the Course of the Circulation, adapting itself by Elongation, Contraction &c., to the Circumstances of the case. They vary Considerably in Size in the same individual at times from one third above, to one third Below the average & their Size bears no relation to the Size of the Animal from which

they may be taken. Although the Elephant has the largest known among Mammalia; the diameter of those of the Mouse is three times greater than the diameter of those of the Musk-deer. In Man the average diameter is 1-3200 inch, thickness, 1-12000 inch - When lying in their Strata the color of the Corpuscles is very pale; but on being suspended the Red deep tint becomes very Apparent. There is much difference in the Color of the Corpuscles formed in the Arterial from those of the Venous System. This has been attributed, by some to Chemical change in the Corpuscle itself, Caused by Alternate action of Carbonic acid and Oxygen gases, on the Haematin of the Corpuscle; but for want of Suffi

cient evidence, this Conclusion has not been generally adopted; and from many indications we look more to the change of form by the Corpuscles, for the explanation. Arterial blood on being exposed to Carbonic acid gas, it is true, does acquire the dark hue of the Venous, and Venous blood exposed to pure Oxygen, will acquire the florid arterial hue, - at least on its surface. But in order that these Changes may take place, it is necessary that the Corpuscles remain unchanged still retaining the full amount of Haematin, and that the normal quantity of Saline matter be in the Serum in which the Corpuscles float; because if defibrinated Arterial

blood be adulterated with twice or three times its Volume of water, it becomes of a dark venous tint. Such a current of Oxygen gas passed through, does not effect. Yet on addition of a saturated solution of a neutral salt — without the presence of Oxygen — the red Color is restored. On the contrary venous blood is reddened by the addition of a saline solution Oxygen not being present, and is hardly darkened by the passage of Carbonic-acid gas. It is clear that the state of Oxygenation of the blood affords no indication of its Color, as the Changes may be effected by other means. On careful examination we will find that the Corpuscles are darkened by whatever tends to dissolve & render them either flat or

biconvex; and conversely brightened on being made biconcave. According to authority the corpuscle is composed of: Haematin, 8.375 parts in 1000, and of Globulin 111.10 parts in 1000. Haematin contains about 7% Iron, of which is held in a decided Coloring matter. Its presence in the corpuscle is due to some action of the Corpuscle itself; and it is believed that fat has an essential share in the formation of Haematin. All the Coloring matter of the blood is in the Haematin. Globulin the Caseine of the blood is that colorless substance which remains after the extraction of the Haematin. It is an albuminous product; an organic

Substance forming the principal part of the red Corpuscle. Lehman says that 1000 parts of red Corpuscles contain Water 688.00, Solid residue 312.00., Haematin, including Iron 14.75 Globulin 282.22., Fat 2.31. Extractive 2.60., Mineral Substances 8.12., Chlorine 1.686. Sulphuric Acid 0.066 Phosphoric acid 1.134., Potassium 3.328., Sodium 1.052., Oxygen 0.667., Phosphate of Lime 0.114. Phosphate of Magnesia 0.073. It will be observed that there is a great deal of Potash in the Corpuscle, which with the excep of Phosphorus as well as of Fat, suggests the probability that the Phosphorized fats are here chiefly formed

which is of itself an indication of one very important office of the red corpuscle; viz: that of furnishing food for the muscular and nervous tissues; phosphorized fats for the nerves, as it is by their presence that nerves are known; - and potash salts for the muscles, of which in this tissue there is a remarkable predominance; and there is further confirmation in the fact that Flesh diet has the property of creating red corpuscles. Red corpuscles have the power of absorbing certain gases, which constitutes one great feature of their use. Oxygen is absolutely necessary for the existence of the tissues, and it is through the Red-corpuscles that the

supply is given. In passing over the net-work of vessels in the Lung, the Corpuscles receive Oxygen through the walls of the blood-vessels, whence it is carried for distribution to the economy. It is requisite that Oxygen be present when Fibrin is formed; and if, as believed Fibrin is formed in the Chyle and Lymph ducts the Corpuscles furnish the Oxygen for this purpose at the time when the fluids are traversing the tubes of the glands, Gases passing in the same manner as in the lung, Oxygen being given off by the blood, and due proportion of Carbonic acid gas received.

In the Composition of the plasma no iron is formed, nor is fibrin

present in the corpuscle. In the normal condition of the blood, the proportion of the white corpuscles to the red is stated by Dume to be, as one to fifty. By Dalton and others as one to two or three hundred. The proportion of red corpuscles in one thousand parts of blood varies from 110 to 182. Various Conditions and Changes are impressed upon the corpuscle by disease and local causes. Whatever excess there may be in the proportion of the solid Constituents of the blood, affects the corpuscles rather than the fibrin, or other ingredients. A superabundance of the corpuscles predisposes the System to the hemorrhagic diathesis, as Congestion of the brain and Apoplexy;

but not necessarily to inflammation. The effect of bleeding is well known to be the decrease of Corpuscles; - hence Venesection in Congestion, Apoplexy &c. In the Condition known as Anaemia the diminution of the Corpuscles is marked. In Chlorosis the red Corpuscles diminish but the fibrin remains the same, and the Clot, though small, is firm and not unfrequently exhibits the buffy coat. In this disease, the proportions of the red Corpuscles have been formed to be as 27. Iron exerts great influence in increasing the Corpuscles in Number. Andral has made this very apparent in some of his experiments. On one occasion after Iron

had been taken only a Short time the proportion of the Corpuscles was found to have increased from 49.7. to 64.3.; and again when taken for a longer time the increase was from 46.7. to 95.7. In one case where the patient was bled for the second time the proportion fell from 62.8. to 49. In Scrofula the diminution of the red Corpuscles is Coexistent, with that of the fibrin. Diminution occurs in Diabetes Mellitus:- also in Scurvy in which disease they have been found to be as deficient, as in low forms of Anaemia: and in the last stages of Bright's disease.

In some cases by the introduction of morbid poisons into the system, the Corpuscles have been known to

disintegrate rapidly. The same occurs when its composition has been materially deranged by the loss of its other constituents. In malignant scarlatina, with purpura, a similar destruction of the corpuscles has been observed. According to Dalton and other recent Physiologists, the red corpuscle of the blood is designated a globule, and treated as a distinct Anatomical structure. They teach that it is an homogeneous structure, composed of proximate principles as other anatomical structures; that it has no more limited life than the rest of the Anatomy;— but is nourished in the same manner, receiving

and parting with proximate Principles in the process of Nutrition, and disintegrating, using a portion of the Oxygen received by it from the lungs for its own nutrition, and is therefore, one of the sources from which Carbonic Acid gas comes. Moreover, they consider the W. B. Corpuscle and red globule altogether different, in Size, Constitution, function &c. And that the red globule is not continued from the white cell, but that the origin and existence of each is separate. In the circulation the movement of the red globule is more rapid than that of the white cell. The latter appears to take

described as containing nuclei; this action of the acid does not prove the fact, as it may be due to coagulation and disintegration of the substance containing the cell itself. Entering the lungs, venous blood is spread through a capillary-work of vessels, in which it is only separated from the aerated fluid contained in the pulmonic cells, by the thin walls of the blood-vessels.

Here it gives up a quantity of Carbonic acid gas, and receives fresh Oxygen in this place. The color gradually changes to scarlet as it progressively attains the condition of arterial blood

position in the vessels next the walls, while the current of red globules passes rapidly through the centre of the tubes. From examination with the microscope, it appears that the globules, in their semi-solid condition, constitute fully one half the entire mass of blood. The chemical difference between the white cell and the red globule has never been decided. When treated with dilute acetic acid the cells are discolored, becoming smooth and circular and the appearance of granules is observed, as if they contained many nuclei.

Although the white cells are

it then goes to the heart, whence
by the systemic circulation, it
speeds on its mission of life.

In the distal ramifications of
the vessels each tissue appropriates
that to itself of which it stands
in need, and only so much as
is requisite, no matter whether
the ingredients be normal or in
excess. Passing to the venous
system through the capillary tubes
to the heart & then to the lungs,
it makes a complete circulation
in a shut tube.

Thesis

on

Cynanche Trachealis - Pseudo-membranous Laryngitis

By

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Session of 1866 - 67 -

Croup - True and false - Cynanche trachealis -
Pseudo-membranous Laryngitis with expudation of lymph.

As, in applying for the degree of M. D. in this institution, it is one of the regulations for each student to hand in a Thesis on some subject connected with the study of medicine, I now make the attempt to comply with that regulation. But, in looking over the vast field before me & the many subjects which are presented for choice, I can find none to which I can do that justice which the importance of the case demands.

Of this disease, there are two proper varieties, Catarhal or False Croup, and sometimes called spasmodic Croup & Pseudo-membranous or True Croup.

It is almost entirly confined to infancy and the early years of childhood & is most frequently found between the ages of one and five years. From some cause,

which is unknown to us, it is oftener a disease of male than of female children. In order to constitute croup, there must be inflammation of the mucous membrane of the Larynx, or of both Larynx & Trachea; & in addition to this, a certain amount of spasm of the glottis. The first variety mentioned, is very little to be feared if properly treated & is often treated successfully without the assistance of a physician. True Croup, on the other hand, is fatal in a majority of cases, even when every thing is done that skill and experience can direct. Sometimes, in families who are predisposed to it, it will be the cause of death to almost all the children

The Causes are the same as those which produce ordinary catarrh, namely, damp air, change from a warm atmosphere to a cold one, changing the clothing of the child, dressing it in thin, light clothing, after having

accustomed it to wearing articles much warmer and heavier. It is, also, sometimes found in connection with certain febrile diseases, as measles, scarletina &c. One of the most common causes is the manner in which infants and young children are dressed at the present day. Neck and arms bared, no matter how cold or damp the weather may be, and all for fashion's sake. As "an ounce of prevention" is said to be worth a pound of cure, I will give such preventive measures as are thought best, in this place. First, the child should be kept warmly clad, and by no means exposed to sudden variations of temperature; if there is a known predisposition to this disease, these precautions should be attended to with more than ordinary care. If the parents are living in a locality peculiarly fitted to bring on the disease, as some low, damp spot, and they know that their

children are predisposed to it, they should make every possible effort to remove them to a drier and more healthy locality and by no means expose their offspring to the almost fatal results which they may expect from an attack of a disease so very - very fatal to young children.

As the False croup is the milder and at the same time the commoner disease, will treat of that first and then return to the more malignant form.

False croup frequently comes on as a common cold for one, two or three days before the croupy symptoms make their appearance. At other times, it comes on suddenly, and generally during the night.

There is a peculiar ringing, metallic cough, which, when once heard, will always be remembered

Immediately succeeding the cough, there is a shrill sound, produced during inspiration, and compared by some to the crowing of a cock. At the same time, there

is often dyspnoea, so distressing as almost to threaten immediate suffocation. The respiration is wheezing as if the air were trying to enter through the contracted passage. The voice is hoarse, but never whispering in this form of the disease.

The countenance of the patient shows great mental anxiety; at first it is flushed, with warm skin and quick pulse, but if the paroxysm continues, the system begins to show the effects of insufficient aeration of the blood. The lips become purple or livid, the face pale, extremeties cold and the pulse feeble and irregular. Generally the paroxysm subsides at this point, and the child falls asleep much exhausted. On awaking they appear to have almost subsided, but may and frequently do, recur on the following night. This may continue, the child being worse at night and better during the day, for three or four successive days.

If the inflammation is moderate, it may now begin to de-
cline, and, in a few days, the patient may be entirely well,
with the exception of a slight cough, which does not, however,
bear the peculiar marks of croup. Sometimes the symptoms
increase instead of diminishing; the inflammation
affecting the bronchial mucus membrane in addition to
those which are already implicated; when such is the
case, we will have all the symptoms of catarrhal fever,
with pain or soreness of the chest.
When the inflammation of the larynx and trachea are
severe, there is pain upon pressure and constant dyspnoea.
The patient may perish from slow suffocation during this
stage, commencing with cold skin and feeble pulse,
and ending in death. But, should death not occur, a
new condition of things make their appearance.
The cough becomes loose and broken, and mucus is
often thrown up during the paroxysms.

This is the secreting stage, and, if the attack is proving milder, each period of coughing becomes shorter and large quantities of mucus and muco-purulent material are expectorated. Sometimes, owing to extreme fullness, from the long continuence of the disease, the little patient is unable to throw off this mucus, which is contained in the air passages, and death ensues from suffocation. Although death may occur in any of the stages, as above mentioned, yet it more frequently results from some complication, as Pneumonia or Bronchitis.

A post-mortem examination shows those changes, which we would expect from the very nature of the disease.

Redness of the mucous membrane of the Larynx, Trachea and Bronchial tubes, swelling and mucus, which latter, is more or less viscid and tenacious, as the

disease is more or less advanced

Sometimes there are no morbid appearances sufficient to account for death, and then we know that death has occured from spasm.

The treatment of this form of the disease is generally followed by favorable results, but we must bear one point in mind, and that is, to be as prompt as possible Even the shortest delay may prove dangerous.

As children, of the ages most liable to croup, do not expectorate, or rather do not throw off the mucus which is brought up by the fits of coughing, an emetic is indicated. Ipecacuanha or tarter emetic may be used.

Four or five grains of the former, or one fourth of a grain of the latter. Ipecac seems preferable to me, as it is less likely to prostrate to a dangerous degree.

Senega, combined with squill and tarter emetic, as in the compound syrup of squill, is highly recommended

by some authors, in doses of twenty or thirty minims to a child two or three years old.

A warm bath is, also, much used; but if this is practiced great care must be taken not to expose the child to cold air during or after the bath. Immediately succeeding the bath, the patient should be rubbed with a heated cloth: woolen will be best. Should this treatment prove beneficial, the breathing will speedily become more easy, the cough looser, and the patient will fall asleep, to awake, almost, if not entirely recovered. Should the bowels remain torpid, as they frequently do, they may be kept open by one or two small doses of castor oil. Before proceeding further with the subject, it becomes necessary to say a word or two in regard to the use of tarter emetic. Should its use be kept up too long, great and even fatal prostration may result. Dr. Wood mentions a case in which death ensued from too long use of the wine of Antimony. It appears to me that it would be better to omit the remedy altogether, as they

are many others which can very well supply its place, than risk the dangers incident to its employment. There are some topical remedies which are considered valuable in the treatment of this disease They should be employed principally when the symptoms do not abate by the use of internal remedies. Should the spasmodic symptoms continue, tobacco may be applied in the form of cataplasm, it is best applied to the anterior part. It must not be allowed to remain long, as it will cause great prostration of the system. Should there be great difficulty of respiration, with pain in the chest, leeches may be applied. As fatal results sometimes follow leech bites on children, it will be best, if practicable, to apply them over some part of the thorax, where pressure may be made with the greatest facility if haemorrhage should result. Should the physician not be called in until the disease has made great headway, he should employ the remedies mentioned, and, failing in them, should then resort to mercury; one half to one grain, of calomel may be employed in conjunction with one fourth or one fifth of a grain of Dovers, powder, every one, two or three hours. As soon as the slightest symptoms of Ptyalism

appear, the remedy must be withheld. If the disease should continue long enough to break down the patients' ~~health~~ strength, stimulants must be used, as Carbonate of ammonia, wine whey, beef tea, and even milk punch, if the debility is very great. Emetics will now be again useful to enable the patient to throw off the mucus which is blocking up the air passages. Mustard and alum, will be very proper remedies at this period, given in emetic doses. External rubefacients may, also, be used with benefit, as oil of turpentine, mustard &c. The Hygienic measures to be employed, are, keeping the patient in a warm room, taking care to allow no draughts of air through it, and, also keeping it at a uniform temperature. The atmosphere of the room should also be kept moist by means of a vessel of boiling water. This latter remedy is recommended, also, in the Pseudo-membranous variety. Having given the treatment, as recommended in cases of false croup, it next, becomes my duty to speak of the far more dangerous and fatal variety, known as True Croup, Pseudo-membranous Laryngitis &c. Sometimes it comes on as Pseudo membranous, from the beginning of the

attack; at other times, it commences just as an attack of catarrhal croup, for which it is mistaken until the voice becomes whispering and the cough changes from its ringing character, to assume a husky sound. There is, also, wheezing in inspiration, and an examination of the fauces shows the fibrinous exudation to be present. The breathing becomes difficult, inspiration appearing to take place through a narrowed passage. The voice is whispering and often quite extinct; or if the patient is able to speak, the effort is so constantly followed by a fit of coughing, that towards the end of the first day, they cannot be persuaded even to make the attempt to talk; instead of which, they will make signs to their nurses and attendants. There is almost always some fever, and frequently of a high grade, quick pulse and exceedingly rapid respiration. If the disease is decreasing, the cough will now have a loose sound; and, if the child is old enough to expectorate, mucus, with small tubes of fibrinous matter, will be thrown up. These casts or tubules, are said by some authors, to be the only diagnostic mark of Pseudo-membranous croup. These casts are some-

times absorbed and occasionally dissolved in the mucus matter. This discharge of false membrane is most apt to occur after the employment of some powerful emetics. Sometimes the discharge appears to give great relief, and the patient recovers rapidly, with only temporary loss of voice. When the membrane has made its way into the bronchial tubes of smaller size, no good effects are likely to result from the ejections of membrane being thrown off. If death is going to occur, it comes on quite early, generally within three days, although death may come on sooner or later. There are, complete loss of voice, wheezing respiration, and the most violent and distressing efforts to expand the chest. The head is thrown back as far as possible, the nostrils dilated, and all the respiratory muscles are brought into the most energetic action. The face bears an anxious expression, which soon changes to a livid hue, the skin being cold and clammy. The patient can no longer receive oxygen enough into his system, and, consequently, speedily dies from Apnoea. There is a variety of croup, (so called) which is generally an attendant on

other diseases; it is contagious, epidemic, and of a low typhoid character. As it is almost entirely different from the two varieties of croup already mentioned, I will do no more than give it this passing notice. It is called Malignant sore throat, diphtheritic sore throat, and secondary croup. The most prominent symptoms are, the loss of voice, fibrinous patches in the fauces, and expectoration of false membrane. Sometimes, the disease only attacks the trachea, but properly speaking it is not croup when such is the case. And now to return to the Pseudo-membranous variety. A post-mortem examination will show false membrane in some portion of the air passages. Either the Larynx or trachea, or both, and sometimes descending into the bronchia. Sometimes the membrane forms tubes, and, at other times, is in narrow strips. The mucous secretion, under the membrane, frequently renders it loose, so that it can easily be detached. This membrane may be very thin, or thick & opague, sometimes tough and strong and again, almost milky in consistence. It is an open question, as to whether the membrane is capable of organization or not. The causes,

in this form of the disease are the same as those mentioned previously. It is said by some to be contagious, but probably, this is only true of the diphtheritic variety. The diagnosis, in this form of the disease should be made speedily. According to Dr. Flint, it presents the croupal phenomena, that is, the spasms and cough, in a less marked degree than the catarrhal variety. In the catarrhal variety, the croupal phenomena generally occur suddenly, and in the night Alteration of the voice is one of the most important diagnostic signs. The presence of Exudation about the epiglottis is a point of great importance. It may be confounded with capillary bronchitis, and, also, with enlargement of the tonsils. But, in Capillary bronchitis, the respirations are gasping and panting, whereas, in croup they are laborious and difficult. Enlargement of the tonsils may be distinguished by the absence of the peculiar croupy cough and the other diagnostic marks of croup. The disease is fatal in a vast majority of cases, even, when properly treated and when the disease does not extend into the bronchial tubes & when

such is the case, the danger is greatly increased. Pneumonia sometimes complicates the disease and adds to the danger. Death may occur at any period from thirty six hours, to four or five days. As the physician rarely sees a case until exudation has commenced, it should be his object to support the strength of the patient, and, at the same time, favor the separation of the membrane. Emetics may be given from time to time, to prevent the membrane, which is already formed and detached, from remaining in the air passages and obstructing respiration. The best emetics are Ipecac, alum and sulphate of zinc. Of the former, four to six grains will be sufficient for a child two years old, or a teaspoonful of powdered alum mixed with molasses or syrup. To allay the spasms, opium may be given, but it should be used with great caution. Calomel may be employed in the dose of gr. ss to gr. i every hour or two; care being taken to suspend the remedy as soon as the slightest symptoms of Ptyalism make their appearance. Topical remedies are useful in aiding in the separation of the false membrane. The throat may be enveloped in a warm poultice, or a cloth may be wrung out

in hot water, and then sprinkled with oil of turpentine and applied to the throat. The inhalation of moist air is highly recommended by some authorities. This is accomplished by keeping vessels of water, boiling in the room and continuing it until the patient is out of danger. Nitrate of silver is, also, recommended by some authors. A solution is used and applied by means of a sponge probang. Cases of recovery are mentioned in which this was the principal agent employed. In regard to bleeding, Dr. Austin Flint says, "depletion by bloodletting, or other means, is of more than doubtful propriety. By reducing the strength of the patient, it conflicts with the great object, which is the prolongation of life until the disease is subdued. On the contrary, the strength is to be supported, as far as practicable, by concentrated nourishment, and the judicious use of alcoholic stimulants". On the other hand, Dr. Chas. West, in his, "Diseases of Children", speaks very highly of bloodletting. He says; "a far more energetic plan must be resorted to, if the disease set in with violence, and has attained its full development before the patient comes under your notice". He goes on as follows: "I have never met with an exception to the rule which pre-

scribes the free abstraction of blood in every case of severe idiopathic croup, when seen at an early period, and before the purple lips and livid countenance announce the long continuance of a serious obstacle to the free admission of air into the lungs. In children under three years of age, bleeding from the jugular vein is preferable to venesection in the arm. The removal of three ounces of blood from a child between one and three years old, or, of six ounces from a child eight years old, generally appears to make a sufficient impression on the disease". When all other remedies prove useless, and the membrane is forming, so as speedily to cut off oxygen from the system, a surgical operation becomes necessary. This is the operation of Tracheotomy. This operation was first successfully performed in the year 1825 by M. Bretonneau: the operation was successful, although it was in the last stage of the disease. From this period until the year A.D. 1850, the operation was performed in France nearly 500 times, & about one fourth of the patients recovered. In the July No. of Braithwaite's retrospect for 1866., Dr. Buchanan, of the Glasgow Infirmary, gives a synopsis of five cases, three deaths and two

recoveries. He says that he has operated in all, twenty six times, with the result of nine cures. This might certainly to encourage us in performing the operation, for death is otherwise inevitable, and, by this operation we may preserve life. In France, the operation has, so far, proved much more successful than in England or in this country. This is probably owing to the fact, that in France, they operate very early in the disease, and some of their operations may have been unnecessary, as the patients might have recovered without it. But as the operation is rarely followed by dangerous results, it is best to be on the safe side, and operate too soon rather than too late.

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of

Alabama.

AN

Inaugural Dissertation

ON

[illegible]

Submitted to the Examination

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Provost, Regents and Faculty

OF

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UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

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By

[illegible]

Of

[illegible]

Session of 1867 18

nature, adequate of themselves to prostrate the patients then producing the disease in its most exaggerated form— in due time relax their hold upon the system, and are apparently succeeded by others not so frightful, yet of sufficient moment to which the medical skill of the physician consists in bending his powers of necromancy, apparently [illegible] equally as efficacious in dispelling the organs of the diseased [illegible]ation. From a careful consideration of the constitution of the two sexes, we are fully justified in ascribing this disease as it occurs [illegible] in the female to a violation of the functions of the [illegible]

system, co-existent with a deviation from the normal integrity of the sexual organs, both of which are so closely allied or work with such harmony, that we should naturally and plausibly (perhaps), attribute a meandering of one, to an obstacle to, or impairment of the functions of, the other, respect being paid to the predominant action of the nervous system. I have previously said that this is a disease generated by the female constitution, and also varying in its import proportionately to the time affected, but it is asserted to have been witnessed in males, supported by such names as Sydenham, Conolly, and Watson, which are too well

established to be disclaimed by one so inexperienced (yet I hope not without an opinion) as myself, and which are doubtless true, suffice it to say there are exceptions, rather than the general rule. As it principally occurs we can hence it as a mere ebullition on the surface while the depths are tranquil for we have the language of Dr Watson as deduced from his experience, where we find that he denominates it a "mimic disease," and again in reverting to it speaks of one of its most prominent symptoms as "mock laryngitis." Symptoms —

When the subjects of the disease are females, we find it most prevalent between the ages of puberty and the cessation

of the catamenia,—or during the fruitless period of woman's life to attempt a scientific classification of the morbid phenomena of this affection, would be incompatible with the intended length of this description, and as my chance of curing this pseudo-affection has been rather finite, but would conspire to ignore such an elaboration. It is generally preceded by premonitory symptoms, which take as a criteria as eminently deleterious as any of the more constant of the paroxysm. Usually the patient is harassed by numerous vague and uneasy sensations, which she vainly attempts to describe but which are nervous irregularities, aggregating until at length they become so [illegible]

g as to be intolerable. The complaint of sensations of fulness and distension in the left side which gradually proceed upwards, rising as it were a sense of weight and fulness in the throat, entailing fits of suffocation and cough, followed by distension and turgescence of the blood vessels of the face, and protrusion of the eyes from their sockets, but as these are transient concomitants the patient speedily relapses into her former condition to be attacked almost immediately by others of any grade of severity and duration. This has been denominated the Globus Hystericus, or as a ball rising in the throat which at some period or other of the affection is sure to afflict

ear, and from a careful perusal of the works of several authors, who have written very elaborately on the subject we find that they unanimously concur in attributing this distressing symptom to a spasmodic or involuntary contraction of the whole alimentary canal by consecutive portions. She is also desparaged in her deplorable condition from a belief that she is a confirmed dyspeptic, as we at times have evolutions of air in in the intestines, which is produced by a decomposition of food. Should she be able to partake of the luxuries of the table, the passage of the air is more disgusting by its constant proximity to change its seat thus

incurring borborygmus, and exquisite pains in the bowels which may be relieved at the time by pressure over the painful part. We also have a most exaggerated symptom grounded by the patient recoiling from the touch or even approach of her attendant, accompanied by that grotesque appearance of the features which is diagnostic of peritonitis, but happily is nothing more than hyperaesthesia, resulting from some departure from a healthy state of the spinal cord, or the nervous filaments emanating from it, a state which should be timely discriminated from the former affection

to preclude the urine burning and
blistering afterwards to the constitu-
tional treatment by mercury, which
are extremely antagonistic to our
patient's condition, by further contam-
inating the circulating fluid. The
patient may appear very much ex-
cited as is indicated by throwing
the arms and legs from one side
of the bed to the other, and evincing
great distress of mind and body,
often so inordinate as to make
attempts at injury of herself
or attendants by biting or other
instinctive promptings, which require
restraint that she may become more
tranquil, and which is often tried.

in vain unless accompanied with exercise.

There is moreover a form of hysteria in which in the beginning of the attack she sinks down insensible, and without convulsions, into a slow and interrupted respiration, soft, full, and frequent pulse, and flushed cheeks; from this condition she gradually recovers depressed in spirits, fatigued, and it may be into a momentary incoherence, but from this state she soon rallies.

In conjunction with the foregoing symptoms she manifests a voracious ness of taste, being partially or wholly averse to ordinary articles of food, but craving or as termed in the vulgar parlance "longing" for the most indig-

edible articles, such as chalk, wafers, wax candles, slate pencils, and such trash, and she often strongly insists on them being granted her, though to the detriment of her general condition. As strikingly peculiar to this disease though it may persist for days, weeks, and even months, the patient retains that symmetry and roundness of form, with that plump condition which obviously indicates full health. To complete the chain of symptoms we sometimes have a partial loss of voice or aphonia, which depends more upon unwillingness and contumacy, than inability to enunciate the voice but which is not partly

nomenic of the disease, we have a com-
ing of blood which is rendered frothy
by the air which it meets, and in some
it is almost black with impaired or
vitality being transmitted to the acids
of the stomach, and the hematemesis (if
proper to so term it) is thought by some
to be vicarious to the menstrual discharge,
but as it occurs during the interval
of the catamenia we cannot judici-
ously attribute it to an absence of the
periodical hemorrhage. This symptom
is eminently sufficient to alarm the
unwary, but when we contemplate the
depletion practised by some of the more
experienced nurses, such as procuring
blood from some extraneous source to

accomplish their diabolical design — thus to confound our best directed efforts to render our diagnosis infallible, and to excite a suspicion of some organic change going on in the viscus, which from the impulse of the moment we deem irremediable. In the general course of the disease our attention is called to palpitation accompanied by pain in the region of the left mamma extending up the side of the chest and down the left arm, and which is described as seriously important, soliciting remedial measures, but I conceive (with my invented theory) these latter to be symptomatic of the presence of other attendant symptoms, producing

their effects upon an already excitable nervous system, which I conclude to be comparatively feeble in anticipation of their deteriorating effects upon the system. We have moreover as strongly corroborative of the treatment pursued, as that she suddenly felt an acute pain over the brow approximating to a neuralgic attack, or hemicrania, but when challenged as to its similarity is described as a nail being driven forcibly into the head, and which in medical language has received the appropriate epithet of Clavus Hystericus, relief from which she soothingly implores as it is a source of considerable annoyance. We should inquire into the state of the liver and

bladder, as they are mostly composed of the former as liquid and urates, the latter as sufficient to prevent the expulsion of its contents, a succinct delineation of these will suffice for the present; but will be more dilated upon in an elucidation of the treatment. Not to evade one very momentous symptom is that of a sense of nausea or sinking at the pit of the stomach, which at times is relieved only by copious vomiting, this can be accounted for by the intimate sympathy which exists between the stomach and all other parts controlled by or receiving nervous influence from the ganglionic centre. Paralysis has been blended with this affection, and

known as hysterical paralysis, but this is another of the assumed whims to mislead us, for patients who have been confined to bed without an intermission for a year or more, have suddenly recovered as by magic under the influence of a religious impression or a fear of impending danger, as when a house takes fire. The case is familiar to us, of the little girl who descended from fortunate progenitors, who used to sit in an armed chair and watch her brothers engage in the sprightly diversions of the day, when on one occasion she deliberately arose from her chair and walked into the house much to the astonishment of all who knew her. We must for obj-

ing impulses. Causes.

These might very properly be divided into predisposing and exciting, but for convenience will be considered together. To give a systematical delineation of this malady, entails an avoidable repetition of its symptoms causes &c., so inseparably do several approximate to each other, and depending as they all incontrovertibly do upon one common cause, for an inordinate mobility or excitability of the nervous system maternally fostered by an imaginative perpetuation of traditional proclivities. It is sometimes received by inheritance, and when thus transmitted it is handed down by parents of a nervous

temperament, or those laboring under some impairment of the mental faculties. It is frequently found as a cause or complication some disorder of the uterine functions, consisting in amenorrhoea, or prolapsus uteri, as induced by menorrhag menorrhagia, leucorrhoea, or preternatural laxity of tissue which binds the womb pertinently to its place of support, rendering it inadequate in its present state to discharge the functions devolving upon it, and consequently giving rise to this exceedingly harassing and deplorable state. For a more definite and elaborate exposition of this complaint, I would beg leave to refer the reader to Works on the diseases peculiar

ever incident to the female constitution.

Supplementary to this also, we have another state which is not incompatible with the various symptoms of the disease, which consists in a depravation of the "stream of life" as evinced by the pale lips and changed conjunctiva, whiteness of the hands, and tumefaction of the ankles, and upon an examination the fact is disclosed of the preponderance of the white corpuscles, - over a normal amount - with a transmuted state of all its constituents approaching nearly in this particular to the disease denominated Leucocythaemia. We also find that as Sir Charles Clark remarks, this disease is "morally contagious", being propagated from one system to

subject to several of the same ward, and when thus engendered is only restrain by the enforcement of some remedial means, which are not altogether congenious to their exalted sensations, and from thus treating our cases we frequently incur the sore displeasure of the patient, simultaneously by ourselves obnoxious to censure as "brutal" "heartless" and other appellations, the occurrence of which we should regard as a favorable augury. A predisposition may be contracted when it does not pre-exist, by pernicious practices, such as sedentary habits, indulgence in sleeping in warm beds prolonged with habitual meals, and as supplementary indulgence in the luxuries of the table, as is evident from

the occurrence of the disease in those who are pleasantly situated, with no necessity to demand either mental or physical exertion, the probability is further increased by the perusal of morally pernicious books such as novels or other reading matter, which by exciting the emotions, lead to vicious practices. From a closer scrutiny of the causes of the disease, we have it strikingly exemplified as peculiar to females, as may be noticed in their youthful training, which begins so early, sent to school to divert their attention from the whims of their natural propensities, and are tutored in the physical exertions of the gymnasium, the girl's predisposition is mat-

[illegible] maturity, & fallaciously instructing her that [illegible] would subvert her femininity, and replace instead those lineaments so notoriously disdained in the present age. We have a popular belief amongst the vulgar that it is caused by a change of the moon, which is deduced from the revolutions of that planet being coincident with the menstrual discharge. By many it is thought to be a disease of the spinal cord from the presence of the morbid secretion which is asserted to have been traced to that centre. The practitioner will no doubt [illegible] the [illegible] induced by the passage of a current

of cold air over the surface of the body. Among the exciting causes may be included everything capable of making a strong impression on the nervous system. Under this head may be enumerated startling news, as sudden intelligence, whether of an acceptable or grievous nature, all seem to redound to one end, viz, a fit of hysteria. Terror and fear are among the mental excitants, as also blighted love may conduce to arouse a dormant predisposition. And lastly, but not the least should be considered the imitative principle. Certain electrical conditions of the air are not without their influence. Nature - The first

in perusing works devoted to the same, that there is some variance of opinion as to its nature, therefore to receive one or the other as exclusive, would be overt bigotry without we could adduce practical facts as corroborative evidence in these times, when theory has become so rife is absolutely necessary. By some it is thought to exist in the brain, by others to be connected with disease of the spinal cord, as is evinced by the tenderness on pressure over the spinous processes. The light that medical research has thrown upon the complaint seems to direct our attention undivided to the state of the organs adapted to a procreation of the species, and which

a cardinal point, & would plausibly elicit the attention of observers, since in every hysterical patient by close scrutiny we observe a disorder of the general ive organs, complicated with prolapsus and its uniform concomitant retrovers ion. These states have been found by Kent - which is no mean authority - but sufficiently notorious to solicit our implicit confidence. The prolific period being limited to about thirty years or the interval between the commencement and cessation of the menses, during which time it is most rife, it suggests itself as logical, that the uterus being in such intimate sympathy with all parts of the body, that any departure from a healthy action in

this organ, would ~~cause~~ entail disease of the nervous centres, with all its disastrous consequences, and which in the female assume all the romance of a hysterical paroxysm with its invincible aversion to treatment. Diagnosis.

There is not in the whole category of disease, any one which presents more marked similarity to this segment of malady, save one, and that is epilepsy, and from which to make an incontrovertible discrimination, without a thorough and established knowledge of the two diseases, hence we appreciate an accuracy of diagnosis, when our decision shall determine the happiness or sorrow of the patient, simultaneously confer upon

us an immunity from the denunciation of charlatanism. In the epileptic fit there is a sudden and complete loss of consciousness with suspension of the power of coordination of the muscles of locomotion, hence the patient is dashed abruptly to the ground.

These symptoms are generally preceded by the epileptic aura, which may warn the patient of an approaching fit in a variety of ways, sometimes, and as in a case I knew the patient before he is attacked invariably had a sensation of something creeping in the thumb, gradually proceeding up the arm until it reached the head, and then immediately succeeded the paroxysm. Other

attacks are preceded by loud cries, be-

-coming in their pitch by bringing first

assistance. The paroxysm are charact-

-ized by distortion of the features lividity

of countenance small quantity of air

passing through the contracted glottis

producing labored breathing not foam-

-ing at the mouth, comparative brevity

insensibility

of the attack, and the profound, wh-

-ich attends the fit and which finishes up

in the attack is considerably mitigated, or

adequate to entail fatigue and indisposit-

-ion to exertion. In the hysterical attack

the former assurance are not so ob-

-vious and infallible, it is seldom usher-

-ed in by loud cries, we have an absence

of distorted features also, the breathing

moreover is more tranquil, foam does not issue from the mouth, unless by a premeditated act of the patient, also biting the tongue which is inevitable on being [illegible] from the mouth in a moment when we have not will to direct or sensation to appreciate is not found in hysteria. We can often observe as supplementary to the palpable symptoms a concealed [illegible], visible only to the undesigning practitioner. By many it is considered an [illegible] indubitable evidence of the hysterical fit by an examination in the region of the spine, which is more or less tender to the touch. As corroborative of our diagnosis during the intervals in the epileptic we have a peculiar physiognomy noticed only in confirmed ep-

leptics. By assiduous attention to the similarities and dissimilarities of the two affections as delineated by several authors, it will capacitate us for a correct diagnosis, and thus preclude the idea of those unpardonable blunders made by incoming quacks.

Treatment—

As in epilepsy this may be adapted first to the paroxysm, then to the interval. We should remember that while one of these diseases may be considered curable, the other after becoming established too often bids defiance to our most potent measures, hence we see the importance of being eager in its cure while such is yet feasible, for time however limited, may render remedial measures nugatory.

Our remedies should be directed to remove the cause of irritation by changing that instable condition of the nervous system, and by so doing substitute quiescence of function for that chaotic train of symptoms with which the patient is encumbered. Our first object should be to put an end to the paroxysm. The dress of the patient if any part of it be tight or constricting should be removed, and if the patient be considered sufficient, force should be added to restrain her violent efforts at injuring herself not to coerce every limb as is the pernicious practice of some, but merely to obviate personal injury. To arouse her when in a state of collapse, we possess a most efficacious remedy to excite a reflex act

in cold water, or [illegible]
gible cold and warm used alternately.
As adjuvant to the preceding, we can
apply pungent vapors to the nostrils, which
are highly extolled, but with the precau-
tion that they be not in too concentrated
a form, lest they overleap the bounds as-
signed to remedies, and become noxious
agents by lighting up an inflammation.
If the patient can swallow or [illegible]
administer some of the nervous stimulants
as assafoetida, oil of Valerian, Hoffm-
ans anodyne, spirits of ammonia all of
which are eulogized as potent in controlling
any abnormal or spasmodic action which
has usurped normal activity of function,
and replaced instead disease. If we [illegible]

the patient when she cannot or will not swallow through persuasion, or a knowledge of its salutary duty, then we should have recourse to other and if possible tantamount means which may consist in an enema, made by mixing two drachms of asafoetida in half pint of water with the yolk of an egg, or an very beneficial half an ounce of tincture may be substituted for the asafoetida and compounded in the same manner. If the bowels be in a costive, obstinate or unnatural condition, they should be early attended to. Any inconvenient action of the brain with a perfect state of health, should be prevented for, this may be a full dose of calomel, followed by castor oil, senna, rhubarb, or any mild cathartic. If

it should be attended by abdominal pain we might associate with it a quarter or half grain of opium, — reference being had to the number of times we wish to repeat the dose. It might not be inappropriate to mention the precaution we should observe in prescribing opium during the comatose condition, as it has an inherent proclivity to induce that state, which if too freely indulged in would obviously supervene to the morbid phenomena, followed if not neutralized or counteracted by death. To return, to ensure a resumption of the functions of the liver, we might give the patient a short course of nitro muriatic acid which is lauded as a stimulant of the torpid organ, but remembering that this [illegible] not un-

up the place of expedients more active in dispelling the phantoms of the imagination. We may also in the incipiency of the attack make inquiry about the condition of the urinary organs, which may be embarrassed by retention and in this case we may resort to the catheter, when unavailing attempts at micturition have been [illegible]. Should we casually detect any acidity of the urine this may be corrected by some of the alkaline carbonates, combined to ensure quiescence of action with hyoscyamus. Any flatulence that may present an obstacle to serenity of action may be remedied by the use of fennel water, or gentian in infusion, conjoined with subnitrate of bismuth, simultaneously a moderate use

of the various condiments, mandrin spirits of peppermint in the dose of twenty drops on sugar tin die. To obviate the nausea which is at times present the patient should be allowed a sufficient quantity of lime water and milk, which will dispel this symptom and also prove potent in sustaining the system against the ravages produced by the complaint. Talking in their presence of some barbarous mode of procedure will often cause a reaction or arouse them to intercept us, as we would introduce the proposed remedy. In the meantime our attention should be drawn to the state of the sexual organs as any failure, or inordinate prosecution of function, so grossly enhances the liabilities to the pseudo-affection.

Many patient when interrogated respecting their generative organs will equivocate but should we apprehend any prevarication we should insist on an examination, that we may thereby make perspicuous what would otherwise have remained obscure to us. If this consists in amenorrhoea, which is mostly present, it should be corrected by appropriate means. The warm bath, alvedic purgatives, and ferruginous tonics, together by anticipating the normal period may establish permanency of function. When it depends upon an atony of the whole system we may find a shock from a galvanic battery salutary in facilitating the desired effect. We have an efficient therapeutical measure in oil of sinzerom.

The application of remedies is entirely a matter of discretion in the particular practitioner, as we find that every remedy has been eulogized and stigmatized by members more or less eminent of the profession. We have indubitable evidence of the utility of iodide of potassium as an alterative in this disease. We should make diligent search for any tenderness over the spine, which may be relieved by cupping or blistering over the tender spots, the blistered surface may be sprinkled over with a grain of muriate of morphia. In very obstinate cases in which the paroxysms recur frequently Dr Wood has found nauseating doses of tartar emetic prove highly advantageous. The various nervous stimulants

employed consecutively when one or two prove too meagre to consummate our expectations. It is necessary to have at your disposal a long list of remedies that you may select those which the contingency may most urgently demand. Pain in the region of the heart or abdomen should be treated with sinapisms, and as internal remedies to allay pain or uneasiness should be added stramonium, belladonna, aconite or hyoscyamus. Marriage is said to have effected cures, when the parties affected were enjoying celibacy, but I cannot adduce any case as corroborative of the assertion. The disorders of the sexual functions should be attended to in their incipiency, that they may be [illegible]

exhaust the strength of the patient, but [illegible]

probable means of cure which [illegible] is yet

achievable.

An

Inaugural Dissertation

on

Hernia.

Respectfully Submitted

to the

Board of Regents and Faculty

of

the Medical

of the

University of Maryland

for the degree of

Doctor of Medicine

by

John Symington

of

Maryland

Session of 1866 & 1867

Hernia

Wishing to select a subject that was of eminent practical importance to the practitioner, both from its frequency and its danger, have selected Hernia in making this selection; I can only briefly mention the various hernia and give the treatment of such, as adopted by modern surgery; time and space preventing a fuller or more minute consideration. Hernia are of various kinds, named generally from their situation, and the protrusion is also known from the character of its contents, and the extent of its progress.

Hernia being so common an ill, and liable to occur at any time, or place, without any warning, requires for its successful treatment an accurate anatomical knowledge, surgical skill

and prompt decision, no time can be lost. as cases have been stated in which violent inflammation set in in a few hours after the first seizure.

"A hernia is the protrusion of any viscus from its proper cavity". as of the brain, the eye, and the lung, but is more generally applied to denote a protrusion of some of the abdominal viscera, its greater frequency here being due to the weakness of these walls, as compared with those of other organs, the abdominal walls are made of muscular structure, which however terminate at their lower border in firm aponeuroses, and are also covered by dense, strong; facia, there occur however, from the arrangement of the different sets of fibres, weak

places, and the attempt to strengthen them is made by nature, who gives to these openings an extra covering of strong fascia. The causes of hernia are numerous, first, the natural weakness of the parts which exposes them constantly to danger; the extent of motion enjoyed by the bowels; the pressure of the abdominal muscles on the viscera; debility, by producing a relaxation of the muscles, thus dilating the already existing apertures for the passage of vessels and nerves; malformation; disease; injury; pregnancy and dropsy. These are generally enumerated as the Predisposing causes. For it is in this condition that it is most liable

to be brought on by the following exciting causes; as, lifting of heavy weights, violent muscular action, playing upon wind instruments, Asthma, Pertussis, any continued violent action of the diaphragm, straining at stool; where there is great difficulty of micturition obesity, where the omentum is loaded with fat, running, leaping, jumping, or any violent muscular exertions, and also very common among troops in the cavalry service, from there being so constantly on horseback. Of hernias, Inguinal is the most common, of it there are two varieties, Direct & Indirect, Indirect or Oblique, passes through both rings and the inguinal canal, Direct passes only through the

External ring, pushing through the muscles and fascia above it. The External ring is formed in the aponeurosis of the external abdominal muscle, this muscle arising from the lower ribs is inserted into the crest of the ilium, and from the anterior spinous process, sends an aponeurosis to the crest of the pubes this is called Poupart's ligament; and is continued below on the thigh as the fascia lata, from this ligament a portion is reflected down on the pectineal line and called Gimbernat's ligament, above the crest of the pubes; the fibres of the external abdominal muscle separate, some to crest of pubes, others to Poupart's ligament leaving a triangular space the external

ring, at the upper part of this interval, are fibres stretched across to strengthen it, called the intercolumnar fascia, from being between the two pillars. The Internal ring is situated between the transversalis fascia, and the peritoneum, above the pubes on a line with Poupart's ligament. Through this ring passes the cord and testicle in the male and the round ligament in the female, and the canal between the rings is called, the Inguinal canal hence, the name of the hernia.

Femoral hernia, is that which passes under Poupart's ligament, or the Crural arch, the thigh is covered by a strong fascia beginning at Poupart's ligament and extending down to the knee, - on the inner part of the thigh below

below the arch is a large opening for the internal Saphenous vein, and some smaller vessels, and is named above and below the fascia lata. it divides into two cornu, the upper and anterior one of which is called, the falciform process or ligament of Hey; from the saphenous opening the crural canal passes up under Poupart's ligament, it is the space included between the femoral artery and vein, and enclosed by a sheath common to all of them, the crural canal passes up to the internal ring. The first stage of the hernia, passes only through this ring, then it passes into the canal the second, and the passage of the gut through the saphenous opening is the third, it then generally curves up over the falciform process.

the Symptoms are often obscure, and sometimes very difficult of recognition. in the groin a variococele sympathetic and may be taken by an inexperienced surgeon for a femoral hernia, they are generally however easily recognized. by a soft swelling which increases in size when the patient stands, dilates when he coughs, when it contains intestine floating ... when made ... and in ... ... then filled with gas, and when returned, ... up with a quick jerk and a gurgling noise, when strangulated, there is obstruction of the bowels, and then inflammation is set up. the sac becomes swollen, and tumid, the pulse is increased, after some time the

hernia cases, and he notions with, and dies. Hernia is found in three conditions, Reducible, Irreducible, and Strangulated. Reducible is one easy of reduction, capable of being thrust in the cavity of the abdomen by simple pressure, this operation is called the "Taxis;" but it is more generally ascribed under strangulated hernia, when the nature of the case makes its reduction more difficult; after the protrusion has been returned, pressure is required to keep the bowel in place, bandages were first applied, but they were so constantly slipping out of place, that they were given up, and now many are the inventions to maintain the requisite pressure, one are the various

now offered to the public the French truss is the best. it consists of a strong steel spring, which can be weakened at the pleasure of the wearer, having a pad, of an oval, ivory, ring. in the centre of which is a small convex pad, the truss to be accurately fitted, must have the pad seated over the abdominal ring, the smaller pad, making pressure directly on the ring, and the larger one pressing the walls and sides of ring together the spring extends around to the opposite side of the spinal column, The chemical or a radical cure consists in wearing a truss with a very hard pad, and a strong spring, to excite inflammation by

the severe irritation caused, lymph will
be thrown out and adhesions formed,
this plan has been successfully tried,
it was discovered accidentally, by a
man, working in his field, who was
with a hernia, which kept slipping
from under a truss which he wore, he
then placed a piece of wood under
the truss, which answered the purpose
very well untill inflammation was
caused, after it was subdued, and
he was able to walk about, he found
the hernia cured; a ball and socket
joint to the pad, gives a person the
free use of the body. the truss should
be worn untill the hernia is cured, and
may frequently be worn, the remainder
of the patients life.

Irreducible hernia is one incapable of being returned, on account of its large size or being filled with faecal matter, or from adhesions of the sac. The patient is subject to many dangers, the principal being constipation of the bowels, and strangulation, also from blows. The usual treatment is to prevent the further protrusion by a hollow truss, to promote the absorption of fat if it contains omentum, the bowel may also ulcerate, the contents be discharged and the patient recover with an artificial anus.

Strangulated hernia consists in an irreducible state of the bowels, constriction of the neck or sac [illegible] the [illegible] of bowel, and faecal matter, [illegible]

great pain, and vomiting of feculent matters. In the treatment of this, the muscles are made relaxed as possible, the thigh slightly flexed on the body, a warm bath is a good relaxative agent, and chloroform produces it more effectually than any other; the surgeon then commences his "taxis," he first turns down the tumor to disengage it from any adhesions, and endeavors to force it up by pressure continued and equal. Ice is also used, and very useful, causing contraction of the muscular fibres, care is taken not to keep it on too long. After all other means have been tried, in vain, the operation is resorted to. There is a great deal of doubt about the time for this operation. Sir Astley Cooper, [illegible]

referred, frequently by one almost as valuable, gives as the following guide, "Indeed there is scarcely any period of the symptoms which forbid the operation; for even if mortification have actually begun the operation may be the means of saving life, by preventing the early reabsorption of the poisonous matters, and relieving the distended intestine."

Small hernias require the operation sooner than large as they are commonly more severely constricted. In the operation, the patient is placed on a bed, and put under the influence of chloroform, the tumor being held firmly an incision is made in the hernia its length commencing opposite the External Ring. Some anatomists recommend incision not near the artery (Epigastric) is

the inner side. the first incision is through the skin and cellular tissue, down to the fascia of the external oblique, a director is introduced under it, and it is slit upwards & downwards, exposing the Cremaster muscle, a covering of the cords and continued in loops down into the scrotum, this is divided in the same manner, and the fascia transversalis is brought into view, remove this in the same way and we have the peritoneal sac of the hernia, slit this up in the same way as the preceding coverings, great care is taken by the surgeon, in dividing these fascia, and during the operation he frequently examines the bowel to see if it has this manner, he pinches up this sac, and makes a [illegible]

sufficiently large to admit the director, it is then run up on the other, the finger is then passed in to find the seat of stricture which may be at one of three places, at the external ring, or inside internal ring (from the ring in the canal, or at the mouth of the hernial sac. When at the external ring, the ~~[illegible]~~ operator, passes in his finger with a knife and slides up on it. (Sir Astley Cooper used a knife cutting only on the point) and divides a few fibres of the tendon sometimes sufficient dilitation can be made with the finger. When the stricture is at the internal ring, the knife is passed up in the same manner, and a few fibres of the conjoined tendon divided. When at the mouth of the sac, it is generally formed by bands of lymph, which are

very carefully divided as there is great danger of wounding the bowel. when there is a large part of omentum in the sac it may be cut off and the parts returned. The sutures are in as general operations though they are not generally withdrawn until [illegible]. [illegible] of the wound into the abdomen occurs. it is often advisable to slit up the abdominal [illegible] and allow the contents of the bowel to escape. the patient after the operation is to be put at perfect rest. particularly by the bowels, by doses of opium, and three or four hours after the operation if the bowels are not moved an enema is given when vomiting, opium is given to quiet the stomach, the patient is not allowed to move until the wound has healed - there is danger after the operation of

Peritonitis; purging of an exhausting character, & tetanus, which must be treated as they show themselves.
Direct hernia, is somewhat different from Indirect, it passing through the walls of the abdomen, carrying with it the conjoined tendon of the internal oblique and transversalis muscles, the cremaster muscle, is not over it. Like the indirect it is of three stages, the reducible requiring a longer truss than in indirect, as it is nearer the median line. It has the artery to the outer side, so that when strangulated the constriction is divided upwards and inwards. Inguinal hernia is less common to females as the abdominal ring is smaller than in males.

Femoral or Crural hernia is found under the crural arch. It increases in size laterally, owing to the [illegible] of the fascia lata. It is lower in women than in men. This is also of [illegible] kinds as the other, and is more difficult of reduction the opening being so small, and much more liable to strangulation. In its reduction, pressure is to be made in two ways, downwards first to disengage it from the edge of the falciform process, then upwards to force it into the crural canal. It requires a great deal of pressure and one or more assistants are necessary. In irreducible hernia, adhesions are not so apt to form as in inguinal, and the parts can be supported with

the hollow truss, and without danger of
their increasing in size.
The stricture in a strangulated hernia
occurs in three different situations, first
at the margin of the fascia lata, next in
the crural arch, and third at the
mouth of the sac. For the operation,
the patient is placed on his back,
with his legs hanging over the edge of
the table, the first incision is made
an inch and a half above Poupart's
ligament, on a line with the centre
of the tumour and the other parallel to
the ligament. the first incision is through
the skin and superficial fascia. which
is above the fascia propria. This is divided
up and down, and the sac is reached.
[illegible]

The finger with the hernia lying upon it
is next carried up and the crural sheath
divided up to Poupart's ligament, if the
hernia will not then be reduced the internal
edge of the crural arch must then be
divided by an incision upwards and
inwards, when at the falciform
process the first incision dividing it.
When these are not dividing through the neck
of the sac, they must be carefully
divided, the intestine returned and
the wound closed with sutures, then
the same treatment as for other kinds.
When the intestine is mortified the parts
are generally left open to slough off.
they may then be reduced and united by
sutures, and the patient recover —
Umbilical hernia passes through the

-ning of the navel which is only filled by some cellular membrane, the opening remaining during life. hernias take place frequently. It appears in the form of a small tumor and easily disappears under pressure. It produces great suffering and sickness, and dangers life as it advances; it occurs most frequently in the young, most frequent among women during pregnancy & children in the time forming of hernia ... and is treated with the closing truss and in Inguinal hernia. The various other hernia such as ventral, thoracic, central &c. are rare and cannot be treated in the confined limits of a college thesis, to which I am restricted. Thus ... the causes, the anatomy, and the treatment for the more frequent & dangerous kinds which I ... respectfully submit.

AN

Inaugural Dissertation

ON

Surgery.

Submitted to the Examination

OF THE

Provost, Regents and Faculty

OF

PHYSIC,

OF THE

UNIVERSITY OF MARYLAND,

FOR THE DEGREE OF

DOCTOR OF MEDICINE,

By

B. B. Browne

Of

Baltimore, Maryland.

Session of 1866 and 1867

Surgery.

Surgery among the Ancients was confined to a few simple operations such as the extraction of darts, arrows, and other foreign substances which had become impacted in the flesh of the sufferer; further than this and the application of soothing lotions to allay pain, and pressure to arrest hemorrhage; their surgical skill seldom extended. Fractures and dislocations appear to have been beyond their power of treatment, as they were content with calling on the offended Deities to relieve the pain inflicted on account of their displeasure.

Even up to the time of Hippocrates very little progress had been made in the Science of Surgery, indeed its advancement was almost impossible on account of the total ig-

norance of human anatomy.

Hippocrates not being able to dissect the human body (on account of the strictness of the laws which were enforced against it) gained much valuable information from dissections of apes and the higher animals, and much of his success in reducing dislocations, adjusting fractures, performing amputations and other operations was due to the knowledge thus obtained.

From his time to that of Celsus, Surgery advanced very little if any, and for a time became almost absolute from the great antipathy of the Early Christians to dissections of the human body, and to the performance of operations, this antipathy prevailed to such and extent that few were disposed to engage in a profession

which promised so little encouragement, and in which the greatest success was likely to be attended with the greatest personal dangers. The Early Christians believing that the Saints and Martyrs were all powerful in relieving the sick and healing the wounded, disdained the interference of man in all cases where their prayers and supplications did not succeed in obtaining the desired relief.

As the priests and Clergy were often called upon to offer their prayers in behalf of the sufferer, and as they were thus often brought in contact with those upon whom injuries had been inflicted, they often undertook the treatment of cases that came under their care, and by

degrees the art of Surgery was abandoned by all others and confined exclusively to them; but this was not destined to continue very long; for by an edict of the Council of Tours in 1163 the priests and Clergy were prohibited from having anything to do with Surgery (as it was thought to encroach upon the dignity of their ecclesiastical calling).

From this time we find it declining very much though not altogether abandoned; the success of some of its followers occasionally added new stimulus, and thus the smouldering flames were kept alive, until Vesalius, Professor of Anatomy in the University

of Padua in 1543, after having made
a great number of dissections, pointed
out many of the errors of Galen, who had
up to this time been considered the
highest authority; and thus by means of
means of his vast labour and study, Sur-
gery was for the first time put upon a
sound and scientific basis, which result
could only be attained by making Anatomy
and a thorough knowledge of the Structure,
properties, and functions of all the organs
and tissues of the body, the first and
necessary preliminary to all future Study.
Aided by the vast researches of Vesalius and
his own thorough anatomical Knowledge, the
great Ambrose Paré was enabled to ad-
vance the Science of Surgery still further:

to him is due many of the principles which gov-
ern the military Surgeon of the present day more
the most important of which was to amputate
the limb immediately when it was considered
impossible to save it.

He also revived the practice of tying arteries af-
ter operations, instead of using the actual cautery
and for this purpose he invented and brought
into use the silken ligature.

The expedient of tying arteries suggested it-
self to his inventive mind in 1536 while
holding the appointment of Chief Surgeon
of the French Army in Provence; at this
time after a severe battle, in which the num-
ber of wounded greatly exceeded the prepar-
ations that had been made for their treat-
ment, his supply of oil for cauterizing

wounded and cut surfaces being exhausted, and being unable to obtain more, he used the ligature to arrest hemorrhage from the larger bloodvessels, and much to his astonishment and delight found the result more favorable than where the boiling oil had been used; and from that time he adopted this practice altogether and recommended it in all his works on Surgery.

Paré being a great favorite at Court, and holding the position of Surgeon successively to Henry II, Francis II, Charles IX, and Henry III, had every facility afforded him of investigating and treating Surgical cases. His great work on "Gunshot Wounds," though the first ever written on the subject, is still considered of the highest authority. During

his time Surgery did not aspire to any great number of operations: Amputations, Laryngotomy, Tracheotomy, Embryotomy, Fistula in ano, and Fistula Lacrymalis, appear to have been most common; the Catheter was also employed in cases of retention of urine, from Spasmodic, and other Strictures of the urethra.

The next great advance in the Science of Surgery, was the discovery of the Circulation, by the illustrious Harvey, in 1616, but not published until 1619, he being unwilling to make the result of his various experiments public until he could convince every one of the correctness of his views; these discoveries threw much light upon the Science of Surgery, (especially that part of it

relative to Aneurisms and their treatment which had hitherto remained beyond Surgical Skill), as no rational mode of treatment could be established. So long as ignorance of the Circulation of the blood through the Arterial System remained.

Probing and Engraving which were introduced at this time, also contributed much in diffusing and perpetuating the discoveries that were made, and in rendering them easier of demonstration and comprehension.

In Germany, during the 17th Century, Surgery was practised in the most heroic manner, no operation however hazardous or unjustifiable in appearance escaped the knife of the ever watchful Surgeons, who undertook it, not for any benefit that would accrue to

the unfortunate patient, but to add lustre and fame to the man of science, who cared less for the success than for the number and variety of his operations.

In the 18th Century, Anatomy and Physiology having been more thoroughly studied and understood, this Science advanced rapidly, many of the most brilliant minds, and greatest geniuses turned their attention to this interesting and useful branch of learning: among whom may be mentioned the great English operator, Percival Pott, who reformed many of the abuses then so common from the use of the actual cautery and other powerful escharotics, which had continued in practice with increased severity from the time of Hippocrates,

the high regard in which he was held by this Ancient Surgeon is best expressed in his own language — "Quoscunque morbos medicamenta non sanant, ferrum sanat; quos ferrum non sanat, ignis sanat; quos vero ignis non sanat, insanabiles existimare oportet" —.

Pott paid much attention to diseases of bone structure, especially that of the vertebral column, angular curvature of the Spine (occasioned by softening and absorption of the bodies of the vertebrae) still retains his name (Potts Curvature).

In the latter part of this Century John Hunter made many investigations into the nature and varieties of Syphilis, and established many points in regard to

its treatment. He also introduced the practice of tying the femoral artery in aneurisms of the popliteal space, instead of cutting down upon and opening the tumor, the great success with which it was attended, resulting from tying the sound artery instead of the diseased, structure has caused its continuation in Surgery up to this time.

To the French Surgeon, Desault, is due the invention of various apparatus and applications for the treatment and adjustment of fractures and for their retention in proper position: he was also the originator of Clinical Surgery, which time has proved to be the most beneficial way in which instruction in this branch can be imparted, for when a dislocation, fracture

or tumor is once seen it is not easily forgotten or mistaken.

Although we can trace up a gradual improvement in Surgical Science, we find that discoveries, once made, were rigidly adhered to, or improved upon; yet it is an undeniable fact that the 19th Century has done more for its advancement than all that have preceded it. The classification of diseased structure, by grouping together those things that resembled each other in some marked particular, and then pointing out those things in which they disagree (begun by John Hunter in the previous Century) has been still further perfected. The character of diseased tissues has been more definitely made out by the aid of the microscope,

the mode of nature's processes of repair has been carefully studied, and investigated, the origin and progress of certain diseases which finally require the aid of the Surgeon have been established, and the modern practitioner is thus enabled in many cases to avoid the most disastrous consequences by preventive means, or by a trivial operation.

In the early part of this Century, Sir Astley Cooper published his first works and turned the attention of the profession to Hernia, which had then been much neglected. In 1806 he tied the Common Carotid Artery with success, he being the first Surgeon who attempted the operation: in 1817 after having experimented with

success upon dogs, he tied the abdominal aorta, and though failing, he still thought the collateral circulation might be established between the internal mammary, (given off from the first portion of the Subclavian, opposite to the thyroid axis) and the Epigastric a branch of the external iliac, the operation has been repeated several times since but with little hope of its ever being successful. Sir Astley's treatises on Dislocations and Fractures are of the highest authority, his doctrine that fractures within the Capsular ligament never united by bony union, after having been a subject of much discussion is now held to be incorrect: most Surgeons of the present

day are indebted to him for the ease and facility with which they are enabled to make out their diagnosis and determine their mode of treatment in fractures and dislocations of the hip and Shoulder-joint

Modern Surgery contrasts the firm silken ligature with the coarse thick cord; the light, soothing applications of the present day with the irritating salves, plasters and heavy masses of lint formerly used; and the small number of adhesive slips, (which can only do good by keeping the surfaces, in apposition) with the pernicious practice of covering (and thus heating) the whole. The discovery and introduction into use, of many active medicinal

agents, has added wonderfully to the advance of Modern Surgery: among these useful additions Iodine and its preparations, hold a high regard in the estimation of the Surgeon for treatment of Bronchocele, of various tumors and swellings of the glands and joints (arising from Scrofulous diathesis,) and of various constitutional Symptoms both Secondary and Tertiary as sequelæ of Syphilis: in Morphia the Surgeon possesses an agent of immense value, for with it he not only allays pain, but produces sleep and thus allows the exhausted nervous system of the patient to rally sufficiently to bear the immense strain put upon it. But to no medicinal agents does modern Surgery owe

more than to Ether and Chloroform;
the latter is undoubtedly most valuable
to the Surgeon, for it acts in smaller
quantity, more quickly, is more agreable in
smell and taste, has less tendency to irri-
tate the throat and lungs, and its final
consequences are less unpleasant, although
its prostrating effects are greater, as for the
comparative danger attending the administra-
tion of the two agents, notwithstanding the
strong prejudice that long resisted against
Chloroform it is now universally conceded
that when used with care dangerous conse-
quences are no more liable to occur than if
Ether were employed: these agents besides
rendering the patient unconscious of pain,
allow the Surgeon to proceed with his operation

in a careful manner and more at his leisure, thus rendering the most formidable cases comparatively safe; they also render very valuable assistance in reducing difficult luxations, since they relax the muscular system so completely that little trouble is experienced where extension, counter-extension and manipulation are properly made.

But this subject upon which volumes might be written instead of these few pages, must be concluded, yet I cannot forbear the mention of some of the recent contributions to the Science of Surgery; among these ranks first the Anterior Splint, so well and favorably known that an eminent French Surgeon published a glowing pamphlet describing its mode of application and recommending its use in all

the Hospital of Paris, by its means fractures of the leg and thigh formerly so intractable are now of easy treatment and speedy cure; the Lithotome rendering the operation of Lithotomy formerly so dangerous one of comparative safety; and the amputation of the foot, without regard to the articulations thus superseding Hey's and Chopart's operations; for these great improvements we are indebted to one of the learned and scientific men of the Faculty of the University of Maryland, whose name will always be reverenced by the Profession and blessed by the many whose sufferings he has alleviated.